

NATIONAL AWARD

FOR EXCELLENCE IN CORPORATE GOVERNANCE

ICSI

# **Tamilnadu Newsprint and Papers Limited**

(A Government of Tamilnadu Enterprise)

Mondipatti, K. Periyapatti Post, Manapparai Taluk - 621 306,

Tiruchirappalli District, Tamilnadu, India.

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Oct 28, 2023

The Additional PCCF(C),

Ministry of Environment, Forest & Climate Change,

Regional Office (SEZ),

34, HEPC Building, Cathedral Garden Road,

Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Proposed Mill Expansion Plan - Installation of Paper Machine, Pulp Mill, Chemical

Recovery Island and Augmentation of Co-Generation Plant and Utilities at Mondipatti village, K.

Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy district - Submission of six

monthly compliance report for the conditions stipulated in EC accorded by MOEFCC for the period

from April'23 to September'23 - reg

Ref: Environmental Clearance F.NO.J-11011/172/2017-IA-II (I) dated 04.04.2019 accorded for TNPL

Unit-II by MOEFCC

This has reference to the Environmental Clearance (EC) accorded by MOEFCC for the Proposed Mill Expansion Plan - Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and Utilities by TNPL. In compliance to points no. (3) under Miscellaneous conditions of the EC, we are herewith submitting the point - wise compliance report for the various conditions stipulated in EC vide reference cited above for the period ending April'23 to September'23.

This is for your kind information and records.

Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(D.V.S.S.A. Bhanu Prasad)

CHIEF GENERAL MANAGER (BOARD PLANT)

Corporate Office: 67, Mount Road, Guindy, Chennai - 600 032. TNPL - The Corporate Identity Number: L 22121 TN 1979 PL C 007799

Fax: 044 - 22350834 / 22354614, Phone: 044 - 22354415 / 16 / 18, 22301094 - 97, E - mail: response@tnpl.co.in / sales.unit2fct@tnpf.co.in, Web: www.tnpl.com



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11/2/23, 10:01 AM View Compliance



# पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय Ministry of Environment, Forest and Climate Change









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### **View Compliance Report at Project Proponent**

### **Proposal Details**

### **Proposal No**

IA/TN/IND/88943/2013

#### **Category**

Industrial Projects - 1

### **Proposal Name**

Mill Expansion Plan of Unit-2, Installation of Paper Machine, Pulp Mill, ChemicalRecovery Island, and Augmentation of Co-Generation Plant and utilities at TNPL, Unit2, Mondipatti, Trichy.

### Plot / Survey/ Khasra No.

Village(s)

Sub-District(s)

State

TAMIL NADU

**District** 

TIRUCHIRAPPALLI

**MoEF File No** 

SW/88939/2018

Name of the Entity/

**Corporate Office** 

TAMIL NADU NEWSPRINT AND PAPERS LIMITED

**Entity's PAN** 

NA

**Entity Name as per PAN** 

NA

Entity details mentioned above is correct?

Agree

### **Covering Letter**

### **Covering Letter**

Click to View

### **Compliance Reporting Details**

**Reporting Year** 

2023

**Reporting Period** 

01 Dec(01 Apr - 30 Sep)

### Remark(if any)

Submission of six monthly compliance report for the conditions stipulated in EC accorded by MOEFCC for the period from April?23 to September?23

## **Details of Production and Project Area**

### **Date of Commencement of Project/Activity**

15-07-2022

	Project Area as per EC Granted(ha.)	Actual Project Area in Possession(ha.)
Private	0	0
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	0	0

	PRODUCTION CAPACITY						
Sr.No.	Name of the Product	Units	As per EC Granted	As per CTO Granted	CTO ID	Valid Up To	Production during last financial year
1	ECF ( Elemental Chlorine Free) Chemical Wood Pulp	Tons per Annum (TPA)	1,40,000	1,40,000	2207143671275	31-03- 2027	78670
2	Steam	Others:Tons Per Hour	180	180	2207143608442	31-03- 2027	89
3	Power	MW	50	50	2207143608442	31-03- 2027	23
4	Paper Board	Tons per Annum (TPA)	2,00,000	2,00,000	2207143671275	31-03- 2027	168035
5	Printing and Writing Paper	Tons per Annum (TPA)	1,65,000	-	-		Nil

### **Conditions**

## **Specific Conditions**

Sr.No.	Condition Type	Condition	Status of Compliance, Remarks/Reason and Supporting
		Details	Documents

1	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall take necessary steps for control of odour.	PPs Submission	A full fledged Odour Control system in place. The details of the system present are attached as Annexure. Complied Attachment: Click to View
2	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall adhere to Zero Liquid Discharge.	PPs Submission	The entire treated effluent is fully utilized to irrigate 6.63 Lakhs of tree saplings in 674.64 Acres earmarked for green belt development including housing colony located in the Mondipatti Village and additional lands located in K. Periyapatti and Chettichatram through drip irrigation. Green Belt report is attached as Annexure.  Complied Attachment: Click to View

### **General Conditions**

 Condition leading	Condition Details	Status of Compliance, Remarks/Reason and Supporting Documents	
tatutory ompliance	The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, I 974 from the concerned State Pollution Control Board/ Committee.	PPs Submission	TNPL Obtained Consent to Establish (CTE) for Mill Expansion for Board Plant & Captive Power Plant. 1a. Consent to Establish (Expansion) for Board Plant - Order Number 2106230724262 Dated 11.08.2021 under Section 21 of Air act, valid till 31.03.2026 1b. Consent to Establish (Expansion) for Board Plant - Order Number 2106130724262 Dated 11.08.2021 under Section 21 of Water act, valid till 31.03.2026 2a. Consent to Establish (Expansion) for Captive Power Plant ? Order Number 2106231618331 Dated 11.08.2021 under Section 21 of Air act, Valid till 31.06.2026 2b. Consent to Establish (Expansion) for Captive Power Plant ? Order Number 2106131618331 Dated 11.08.2021 under Section 25 of Water act, Valid till 31.03.2026 TNPL obtained Consent To Operate (CTO) for Mill Expansion in a phased manner for Board

Plant & Captive Power Plant. 1a. Consent to Operate (Phase - 1 of Expansion) for Board Plant ? Order Number 2207243671275 Dated 15.07.2022 under Section 21 of Air act, Valid till 31.03.2027 1b. Consent to Operate (Phase - 1 of Expansion) for Board Plant ? Order Number 2207143671275 Dated 15.07.2022 under Section 25 of Water act, Valid till 31.03.2027 2a. Consent to Operate (Phase - 1 of Expansion) for Captive Power Plant? Order Number 2207243608442 Dated 15.07.2022 under Section 21 of Air act, Valid till 31.03.2027 2b. Consent to Operate (Phase - 1 of Expansion) for Captive Power Plant? Order Number 2207143608442 Dated 15.07.2022 under Section 25 of Water act, Valid till 31.03.2027 Complied Attachment: Click to View

2 Statutory compliance

The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.

**PPs Submission** 

TNPL Obtained permission from District Collector,
Trichy for drawl of water from River Kavery for a period of Five Years till 31/10/2025 vide letter A1/15426/2020 dated 26.09.2020. Copy of permission attached as Annexure.
Complied
Attachment: Click to View

3 Statutory compliance

The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

PPs Submission

Hazardous Waste
Authorization? Order
Number 17HFC6656354
Dated 21.06.2017, Valid till
20.06.2022. Renewal of
Authorization is under
progress with the
Application Number
45404642 dated
21.05.2022 on TNOCMMS
portal, which is under
Scrutiny of TNPCB,
Chennai. Details attached
as Annexure.

AM		VI	ew Compliance	
				Complied Attachment: Click to View
4	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7thDecember 20 1 5 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and the systems be calibrated according to equipment supplier's specification through labs recognized under Environment	PPs Submission	Continuous Emission Monitoring System (CEMS) facility available for 24x7 monitoring of stack emission of Power Boilers, Chemical Recovery Boiler and Lime Kiln and the same are connected to TNPCB and CPCB servers. The systems are being calibrated periodically and the calibration reports are attached as Annexure. Complied Attachment: Click to View
		(Protection) Act, 1986 or NABL accredited laboratories.		
5	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.	PPs Submission	Fugitive emissions survey is being carried out on monthly basis in 7 Locations through independent labs possessing valid accreditation. ROA for the period Apr?23 to Sep?23 is attached as Annexure. Complied Attachment: Click to View
6	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOx in reference to SO2 and NOx emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.	PPs Submission	Already one Continuous Ambient Air Quality monitoring system (CAAQMS) has been installed and connected to TNPCB & CPCB servers. Additional new CAAQMS is commissioned in the location (First floor of the West gate) approved by The Assistant Director, AEL, TNPCB on 29.06.2023 and connected to TNPCB server. Awaiting for approval from CPCB to connect the new CAAQMS to CPCB server. New CAAQMS report is attached as annexure. Complied Attachment: Click to View

7	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	PPs Submission	Proof of submission of the monthly summary report of continuous stack emission and air quality monitoring and results of manual stack, air and fugitive emission monitoring report to Regional office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB is attached as Annexure.  Complied Attachment: Click to View
8	AIR QUALITY MONITORING AND PRESERVATION	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	PPs Submission	Details of Appropriate Air Pollution Control (APC) system provided to control fugitive emission and stack emission are submitted herewith as Annexure.  Complied Attachment: Click to View
9	AIR QUALITY MONITORING AND PRESERVATION	The project proponent shall install high volume, low concentration NCG collection & destruction system to mitigate all malodorous gases emitted.	PPs Submission	All the requisite systems to control NCG and malodorous gases installed and being kept in operation. Detailed report submitted herewith as Annexure Complied Attachment: Click to View
10	AIR QUALITY MONITORING AND PRESERVATION	Emissions shall be controlled from chemical recovery section through primary and secondary venturi scrubbers.	PPs Submission	Primary and secondary venturi scrubbers installed to control emissions from chemical recovery boiler. Photograph attached as Annexure. Complied Attachment: Click to View
11	AIR QUALITY MONITORING AND PRESERVATION	Pollution control system in the pulp and paper plant shall be provided as per the CREP Guidelines of CPCB.	PPs Submission	CREP guidelines issued by CPCB for large pulp and Paper Mills are being implemented and maintained. Details attached as Annexure. Complied Attachment: Click to View

12	AIR QUALITY MONITORING AND PRESERVATION	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	PPs Submission	Road sweeping machine and Vacuum cleaners are being used to clean the roads and shop floors respectively. Photograph is attached as Annexure. Complied Attachment: Click to View
13	AIR QUALITY MONITORING AND PRESERVATION	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	PPs Submission	Wind shelter fence provided near the raw material stock piles. Photograph attached as Annexure. Complied Attachment: Click to View
14	AIR QUALITY MONITORING AND PRESERVATION	In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.	PPs Submission	TNPL abides to this condition. Agreed to Comply Attachment: NA
15	AIR QUALITY MONITORING AND PRESERVATION	The company shall install Oxygen Delignification (ODL) Plant and shall maintain AOX below 1 kg/tonne of paper production	PPs Submission	Two stage Oxygen Delignification (ODL) is installed in Hardwood Pulpmill and AOX is maintained below 1 kg/tonne of paper production. Complied Attachment: Click to View
16	AIR QUALITY MONITORING AND PRESERVATION	Elemental Chlorine Free (ECF) technology shall be used and lime kiln shall be installed to manage lime sludge	PPs Submission	Elemental Chlorine Free (ECF) bleaching technology is adopted in Hard Wood Pulpmill. Lime Kiln installed and is in operation. Photograph of HW plant and Lime kiln attached as Annexure. Complied Attachment: Click to View
17	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall install 24x7 continuous effluent monitoring with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7thDecember	PPs Submission	Continuous effluent monitoring System (CEFMS) is installed for 24x7 monitoring of effluent and the same are connected to TNPCB and CPCB servers. The system is being calibrated periodically and the

2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.

calibration report is attached as Annexure. Complied Attachment: <u>Click to View</u>

# 18 WATER QUALITY MONITORING AND PRESERVATION

The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

#### PPs Submission

Ground Water quality is monitored once in Six months by analyzing well water samples & Piezometer samples in 12 & 7 locations respectively through independent labs possessing valid accreditation. ROA of the review period is attached as Annexure. Complied Attachment: Click to View

# 19 WATER QUALITY MONITORING AND PRESERVATION

The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

#### **PPs Submission**

Proof of submission of the monthly summary report of continuous effluent monitoring and results of manual effluent and ground water quality monitoring report to Regional office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB is attached as Annexure.

Complied

Attachment: Click to View

# 20 WATER QUALITY MONITORING AND PRESERVATION

The project proponent shall provide the ETP to meet the standards prescribed in vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7thDecember 2015 (Thermal Power Plants) as amended from time to time.

#### PPs Submission

A full fledged 15 MLD **Effluent Treatment Plant** with complete system of Primary clarification, MBBR technology, Biological activated sludge process with secondary clarifier, DAF system and Pressure sand filter is installed towards treatment of effluent generated from various sections to meet the standards prescribed by the Board. Complied Attachment: Click to View

21	WATER QUALITY MONITORING AND PRESERVATION	Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	PPs Submission	4 Nos of Sewage Treatment Plant (STP) for Board Plant, 1 No. of STP for Power Plant and 1 No. of STP for Housing Colony are installed and in operation. Sewage water samples are analysed through independent labs possessing valid accreditation. ROA of review period is attached as Annexure. Complied Attachment: Click to View
			PPs Submission	4 Nos of Sewage Treatment Plant (STP) for Board Plant, 1 No. of STP for Power Plant and 1 No. of STP for Housing Colony are installed and in operation. Sewage water samples are analysed through independent labs possessing valid accreditation. ROA of review period is attached as Annexure. Complied Attachment: Click to View
22	WATER QUALITY MONITORING AND PRESERVATION	Garland drains and collection pits shall be provided for each stock pile to arrest the runoff in the event of heavy rains and to check the water pollution due to surface run off.	PPs Submission	Storm water drains and collection pits are provided to arrest the run off in the event of heavy rains and to check the water pollution due to surface run off.  Complied  Attachment: Click to View
23	WATER QUALITY MONITORING AND PRESERVATION	Tyre washing facilities shall be provided at the entrance of the plant gate(s).	PPs Submission	Tyre washing facilities provided at the entrance of the plant gate. Photograph Attached. Complied Attachment: Click to View
24	WATER QUALITY MONITORING AND PRESERVATION	Ensure that there is no black liquor spillage in the area of pulp mill, no use of elemental chlorine for bleaching in mill, installation of hypo preparation plant.	PPs Submission	TNPL is having alkali pit where all black liquor is collected at one place and pumped back to reject tank and from there it is taken to digester blow tank so there is no spillage in Pulpmill. Chlorine di

				oxide is used for bleaching the pulp and hence no use of Elemental chlorine for bleaching. Complied Attachment: Click to View
25	WATER QUALITY MONITORING AND PRESERVATION	Ensure that no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE in the Chemical recovery process directly to ETP.	PPs Submission	TNPL ensures that there is no spillage in Chemical Recovery Plant. Foul condensate generated from MEE is concentrated in stripping column and pumped to methanol column to separate methanol and CNCG. CNCG is fired in lime kiln. Methanol sent to storage tank and then pumped for firing in lime kiln. Hence no discharge of foul condensate to ETP. Complied Attachment: NA
26	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall practice rainwater harvesting to maximum possible extent.	PPs Submission	Rain Water Harvesting facilities available in the plant are attached as Annexure. Complied Attachment: Click to View
27	WATER QUALITY MONITORING AND PRESERVATION	Water meters shall be provided at the inlet to all unit processes in the steel plants.	PPs Submission	Water meters are provided at the inlet of Paper Board Plant, Captive Power Plant, Pulpmill, Recovery Island and all unit processes. Complied Attachment: NA
28	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.	PPs Submission	TNPL adopts new advanced technology with maximum recycling of treated effluent. Complied Attachment: NA
29	Noise Monitoring & Prevention	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.	PPs Submission	Noise level survey is being carried out through independent labs possessing valid accreditation. Proof of submission of the report to Regional office of the

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				Ministry is attached as Annexure. Complied Attachment: Click to View
30	Noise Monitoring & Prevention	The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.	PPs Submission	Ambient Noise levels are conforms to the prescribed standard as per survey carried out through independent labs possessing valid accreditation.  Complied Attachment: NA
31	ENERGY PRESERVATION MEASURES	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;	PPs Submission	Installed 17 Nos of Solar lights in colony area and 5 nearby villages. 200KW Roof top solar plant installation is under progress. Complied Attachment: Click to View
32	ENERGY PRESERVATION MEASURES	Provide LED lights in their offices and residential areas.	PPs Submission	Only LED lights are placed in the office buildings and residential areas of TNPL Unit - II. Complied Attachment: NA
33	WASTE MANAGEMENT	Deinking sludge and fine sludge from ETP shall be disposed through TSDF.	PPs Submission	There is no deinking process in TNPL Unit - II. Complied Attachment: NA
34	WASTE MANAGEMENT	Black Liquor shall be separately processed for recovery of energy and chemical in a Chemical Recovery Process.	PPs Submission	A separate chemical recovery plant including Recovery Boiler is installed and in operation to recover 1100 TPD of Black Liquor solids from black liquor. Complied Attachment: Click to View
35	WASTE MANAGEMENT	Sufficient number of colour coded waste collection bins shall be constructed at shop floors in each shop to systematically segregate and store waste materials generated at the shop floors ( other than Process waste) in designated coloured bins for	PPs Submission	5 Nos. of colour coded bins are placed at various places to systematically segregate and store waste materials. Complied Attachment: Click to View

		value addition by promoting reuse of such wastes and for good housekeeping.		
36	WASTE MANAGEMENT	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office. (in case of CPP)	PPs Submission	The entire fly ash is being utilized in TNPL Cement plant for cement production. Complied Attachment: NA
37	WASTE MANAGEMENT	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 20 I 6	PPs Submission	Used Oil, Grease and other Hazardous Waste are being disposed to authorized recyclers as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 20 I 6. Complied Attachment: NA
38	GREENBELT	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant	PPs Submission	TNPL has planted 6.63 lakhs tree saplings in 674.64 Acres earmarked for green belt development including housing colony located in the Mondipatti Village and additional lands located in K. Periyapatti and Chettichatram and in the peripheral area of the new project. Details are attached as Annexure. Complied Attachment: Click to View
39	GREENBELT	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.	PPs Submission	GHG inventory for the plant and Programme for reduction of the same including carbon sequestration including plantation is under preparation. Agreed to Comply Attachment: NA
40	Human Health Environment	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented	PPs Submission	Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan is implemented. Onsite Emergency

-\IVI			ew Compliance	
				Preparedness plan duly approved by Director of Industrial Safety and Health on 27/07/2022 is attached as Annexure. Complied Attachment: Click to View
41	Human Health Environment	The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	PPs Submission	There is no high temperature work zone at TNPL, Unit-II. Complied Attachment: NA
42	Human Health Environment	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	PPs Submission	Occupational Health centre (OHC) is established within the factory site and is in operation for Occupational health surveillance of the workers on a regular basis. TNPL also tied up with reputed hospitals for carrying out periodic health checks for the employees on regular basis and records are being maintained. OHC details are attached as Annexure. Complied Attachment: Click to View
43	Human Health Environment	The proponent shall follow International Standards of safety for CIO2 generation and storage system, and ozone plant, and certification on regular basis may be submitted. Provision for adequate safety for personnel in case of any accidental leakage should be in place	PPs Submission	International Standards of safety for CIO2 generation and storage system is being followed and also adequate safety for personnel is provided. Necessary PESO license is attached herewith. Complied Attachment: Click to View
44	Corporate Environmental Responsibility	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	PPs Submission	Applicable provisions under CER is being compiled by TNPL. Being Complied Attachment: NA
		Environment Responsibility.	PPs Submission	Applicable provisions under CER is being compiled by TNPL Complied Attachment: Click to View

45	Corporate Environmental Responsibility	The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/ forest I wildlife norms I conditions and / or shareholders I stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of sixmonthly report.	PPs Submission	A well laid down Environmental Policy has been developed as part of Integrated Management System which is duly approved by Managing Director is in place. Copy of policy is Attached as Annexure. Any deviation or violation of the environmental norms or conditions is discussed in the board meeting. Complied Attachment: Click to View
46	Corporate Environmental Responsibility	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	PPs Submission	A separate Environmental cell is formed under the control of senior executive. Complied Attachment: NA
47	Corporate Environmental Responsibility	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	PPs Submission	TNPL abides by this condition. Detailed EMP of EIA study report is attached as Annexure. Complied Attachment: Click to View
48	Corporate Environmental Responsibility	Self-environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	PPs Submission	TNPL complies & certified with ISO 14001:2015 Environment Management System. Auditing of Environmental aspects and impacts of each process activity is being done. Significant study and accordingly Standard Operating procedure is being followed.

					Being Complied Attachment: NA
49	Corporate Environmental Responsibility	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Pulp and Paper plants shall be implemented.	PPs Submissi	on	CREP guidelines issued by CPCB for large pulp and Paper Mills are being implemented and maintained. Details attached as Annexure. Complied Attachment: Click to View
50	MISCELLANEOUS	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website	PPs Submissi	on	Public notice given in two local newspapers dated 28.05.2019. A copy of the same is attached as Annexure. Complied Attachment: Click to View
51	MISCELLANEOUS	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	PPs Submissi	on	Complied with. Acknowledgement from the respective offices is submitted as Annexure. Complied Attachment: Click to View
52	MISCELLANEOUS	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.	PPs Submission	Clearar results upload https:/ on hal	iance Status of Environment nce conditions including of monitoring data Is being led in TNPL Website /www.tnpl.com/compliance/f-yearly basis.  Complied ment: NA
53	MISCELLANEOUS	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	PPs Submissi	on	Electronic display board depicting Real time emission monitoring data has been installed in public domain, viz., near entrance gate. Photograph attached as Annexure. Complied Attachment: Click to View

54	MISCELLANEOUS	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	PPs Submission	TNPL submits Six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of MOEF&CC at Environmental Clearance Portal. Previously submitted report is attached as annexure. Being Complied Attachment: Click to View
55	MISCELLANEOUS	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	PPs Submission	Environmental Statement - Form V for the year 2022-23 is submitted to relevant authorities on 27.09.2023. Form V for the year 2022-23 is attached as Annexure. Being Complied Attachment: Click to View
56	MISCELLANEOUS	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	PPs Submission	Consent to Operate (CTO) for Board Plant and Captive Power were received on 15/07/2022 and commercial production commenced subsequently from the date of issue of CTO. Complied Attachment: NA
57	MISCELLANEOUS	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	PPs Submission	Strictly complying with TNPCB conditions. CTO (Expansion) for the part of MEP obtained on 15/07/22. Complied Attachment: NA
58	MISCELLANEOUS	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	PPs Submission	TNPL abides by all the commitments and recommendations made in EIA/EMP report. Attached detailed EMP report as Annexure. Complied Attachment: Click to View
59	MISCELLANEOUS	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of	PPs Submission	Complied with. As per Environmental Clearance F.NO.J-11011/172/2017-

		Environment, Forests and Climate Change (MoEF&CC).		IA-II (I) dated 04.04.2019 accorded for TNPL Unit-II by MOEFCC, ECF Chemical Wood Pulpmill, Recovery Plant including Recovery Boiler, Lime Kiln, One TG of capacity 20 MW was implemented under Phase -1 of Mill Expansion Plan. Remaining Printing and Writing Paper Machine, One Power Boiler of Capacity 130 TPH & One TG of capacity 30MW will be taken up in due course. Complied Attachment: NA
60	MISCELLANEOUS	Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.	PPs Submission	TNPL agreed to comply with this condition. Agreed to Comply Attachment: NA
61	MISCELLANEOUS	The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.	PPs Submission	TNPL agreed to comply with this condition. Agreed to Comply Attachment: NA
62	MISCELLANEOUS	The Ministry reserves the right to stipulat~ additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.	PPs Submission	TNPL agreed to comply with this condition. Agreed to Comply Attachment: NA
63	MISCELLANEOUS	The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.	PPs Submission	TNPL agreed to comply with this condition. Agreed to Comply Attachment: NA
64	MISCELLANEOUS	The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with	PPs Submission	TNPL agreed to comply with this condition. Agreed to Comply Attachment: NA

		their amendments and Rules and any other orders passed by the Hon'ble Supreme Court ofIndia / High Courts and any other Court of Law relating to the subject matter.		
65	MISCELLANEOUS	Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 20 I 0.	PPs Submission	TNPL agreed to comply with this condition. Agreed to Comply Attachment: NA

### **Document Upload**

Last Site Visit Report (if available)
NA
Last Site Visit Report Date (if available)
Additional Attachment (if any)
NA

### **Additional Remarks (if any)**

✓ I 'TAMIL NADU NEWSPRINT AND PAPERS LIMITED' hereby give undertaking that the data and information given in the filed compliance and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected, and clearance given, if any, to the project will be revoked at our risk and cost. In addition to above, I hereby give undertaking that no activity such as change in project layout, construction, expansion, etc. has been taken up.

Back

# TNPL

# TAMIL NADU NEWSPRINT AND PAPERS LIMITED

### BRIEF WRITE-UP ON DNCG & CNCG COLLECTION AND INCINERATION

As part of Mill Expansion Plan, TNPL installed a 400 TPD Hardwood Pulp mill, along with connected Chemical Recovery System. During the Pulping process, certain reduced Sulphur based Non-Condensable Gases (NCG) is generated which will create odorous environment, in and around the mill area. In order to have an odour free environment, a state of the art technology has been considered right at the concept stage of the project. Accordingly, a full fledged NCG collection and incineration system has been installed which plays a vital role in helping the pulp mill meet strict environmental regulations as well as being a good neighbour in the surrounding community.

There are two main sources of NCG in a pulping process. Some sources emit a small, but highly concentrated amount (Concentrated NCG or CNCG), while others emit large volumes with low concentrations (Dilute NCG or DNCG). During the process, Dilute NCG is generated in the Pulp mill digester and the Black liquor storage areas, while Concentrated NCG is generated in the Black liquor evaporation process. The DNCG and CNCG are collected and incinerated through exclusive systems, as described below:

### **CNCG & Methanol Generation and incineration**

The foul condensate from the Black liquor Evaporation plant is stripped through LP steam or first effect vapour. After stripping the Foul condensate is received as "A" condensate, which is recycled back in the process and the stripper outlet gas (SOG) is further stripped through LP steam in a methanol column. From the stripper column, CNCG is generated and the methanol is recovered in liquid form.

Methanol generated is stored in a storage tank and then used as fired in the Lime Kiln.

In addition to the CNCG generated from the SOG stripping of Evaporation plant, the gases emanating from Vacuum pump shall also be collected and transferred to Lime Kiln through a steam ejector, for firing.

In case of Lime Kiln stoppage, the CNCG is routed through a flare system, where the gases are fired.

### **Collection and incineration of DNCG**

All storage tanks from Evaporator plant (Weak Black Liquor, Spill Liquor, Condensate storage tanks, HBL tank) vents are connected through a flap valve to collect the DNCG. The DNCG shall be scrubbed with cooling water and then through a blower it is sent to the Chemical Recovery Boiler.

Similarly, all storage tanks from Recausticising plant (White Liquor tanks, Green Liquor tanks, Dregs tanks, Weak white liquor tank, Dilution tank, wash water tank) vents are connected to collect the DNCG, for subsequent firing in the Chemical Recovery Boiler.

The Pulp mill has a separate collection system for the DNCG gases from the Digesters, Pulp Discharge tank and the Black liquor storage tanks. The DNCG system forms part of the Hardwood digester. The system delivers the DNCG after necessary scrubbing and joins the DNCG collected from the Evaporator and Recausticizing area, and fired into the Chemical Recovery Boiler.



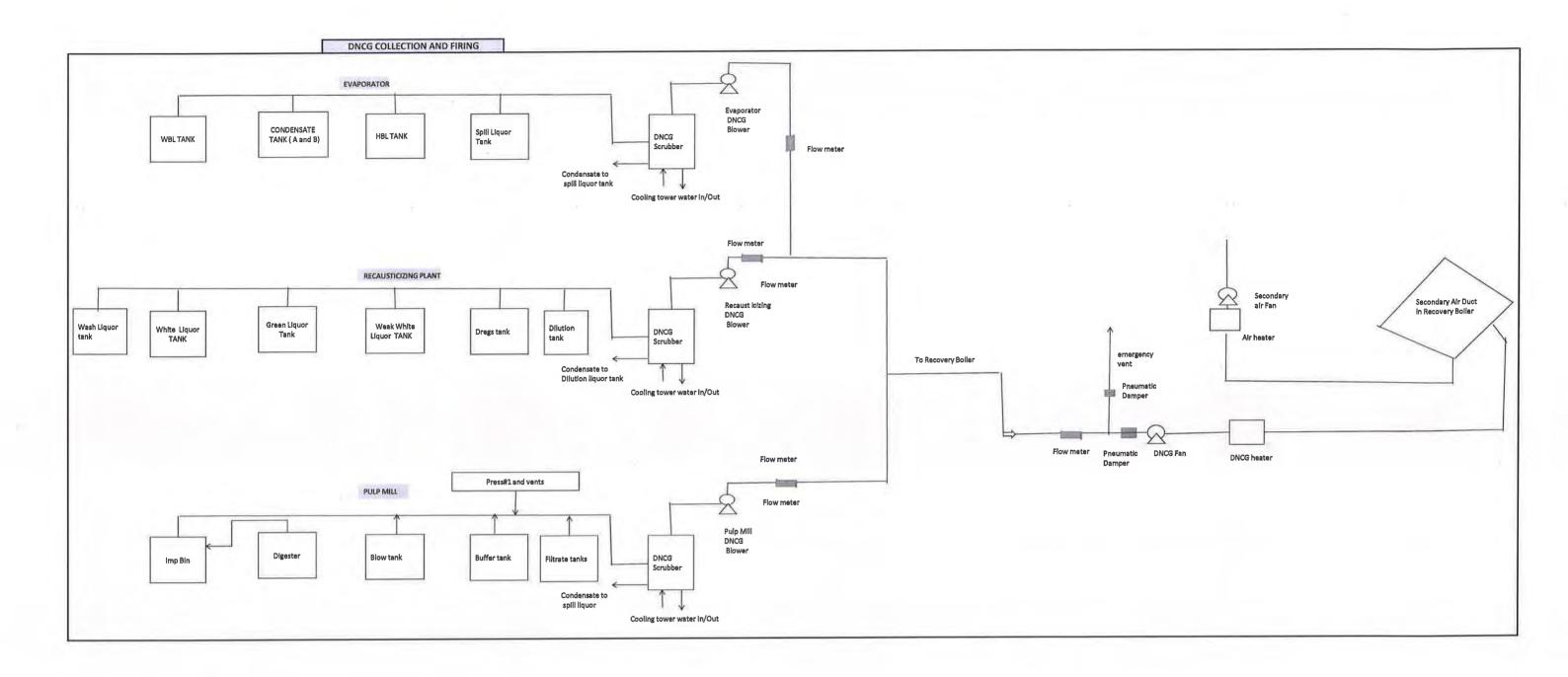
# TAMIL NADU NEWSPRINT AND PAPERS LIMITED

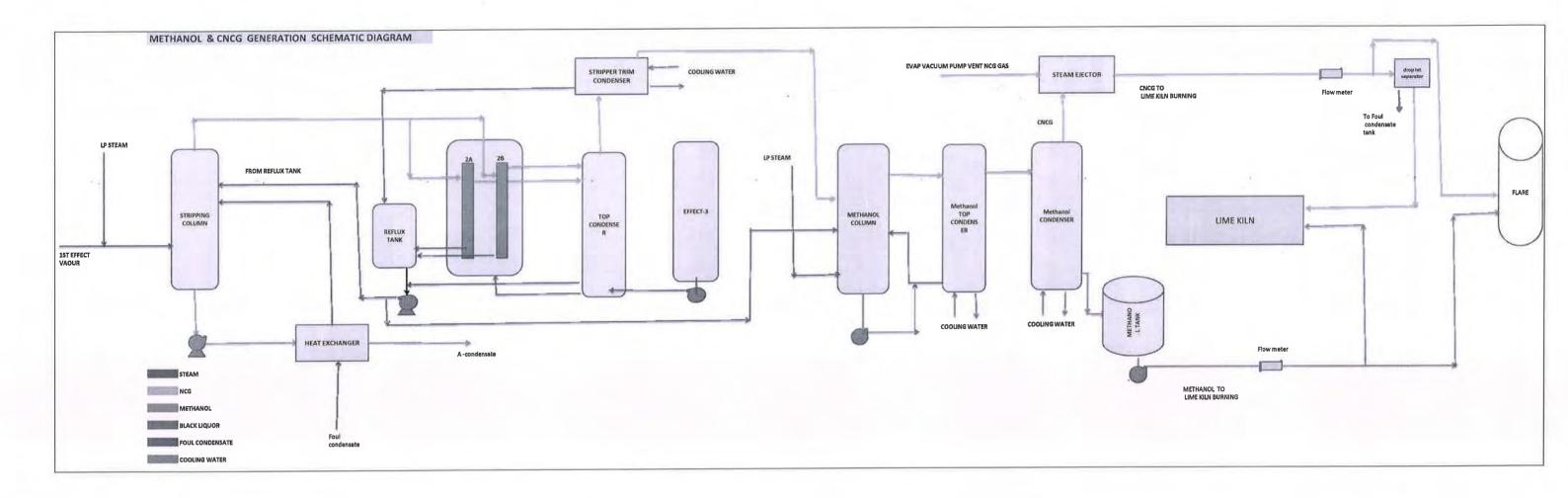
DNCG forms part of the secondary air in the Recovery Boiler. A DNCG fan in the Recovery Boiler receives gases from all the above areas and the gas pressure is raised to ensure entry of the DNCG without any interruption through the Secondary air duct. The DNCG fan speed is controlled by a Variable Frequency drive.

DNCG fan delivery first flows to the DNCG gas preheater. Gas is heated by both LP and MP steam gas preheater. Gas is preheated to match the secondary air duct temperature of 130-150 Deg C. After preheating gases are led to the secondary air duct.

A brief schematic diagram of the above systems is attached.

Capturing the CNCG and DNCG gases without allowing it into the atmosphere is a challenge. Yet, the reward can be significant. Not only the mill becomes odour free, but treating and recovering NCGs can also yield a "fuel" with significant heating value. This ensures a sustainable technology for mill operations, which aligns with the interest of the environment and society.





## **TNPL UNIT II**

## **GREEN BELT DEVELOPMENT/IRRIGATION SCHEME**

The area allocated for greenery development under Captive Power Plant, Board Plant and Additional areas pertaining to TNPL Unit-II is summarized as below:

Power Plant (Mondipatti)

Total extent of Land Area (in Hectares)	16.187			
Green belt/Irrigation area developed (in Hectares):	6.465			
Board Plant (Mondipatti)				
Total extent of Land Area (in Hectares)	106.872			
Green belt/Irrigation area developed (in Hectares):	46.555			
Additional area in Chettichatram & K. Periyapatti				
Total extent of Land Area (in Hectares)	231.129			
Green belt/Irrigation area developed (in Hectares) :	210.663			

Total Green Belt/Irrigation Area (in Ha): 5.665+36.155+210.663 = 272.949 Hect. i.e. Total area covered under plantation using treated effluent = 252.483 Hect.

TABLE A: Summary of TNPL Unit II Tree planting details as on 30.9.2023

SI No	Area	Total area so far covered in Hectares	Total No. of trees so far planted
01	Captive Power Plant (Mondipatti)	6.465	28,290
02	Board Plant (Mondipatti)	46.555	100590
03	Additional Area in Chetttichatram & K. Periyapatti	210.663	6,82,903

<sup>\*</sup>Out of 231.129 Hectares, 20.466 hectares are TNPL Unit – II Township. Remaining area of 210.663 Ha is under greenbelt area.

TABLE B:

Tree planted details in Captive Power Plant (Mondipatti) as on 30.09.2023

SI.		No. of
NO	Name of the Tree	Trees
1	Millingtonia (Maramalli)	520
2	Polyalthiya longifolia	48
3	Pongamia pinnata (Pungam)	305
4	Syzygium cumini (Jamun)	25
5	Terminalia catappa (Badam)	850
6	Thespesia populnea (Puvarasu)	80
7	Eucalyptus hybrid (Eucalyptus)	11899
8	Casuarina equisetifolia (Casuarina)	13744
9	Muntingia calabura (Singapore cherry)	16
10	Mimusops elengi (Mahilam)	21
11	Azadircta indica (Neem)	47
12	Kigelia pinnata (Siva kundalam)	21
13	Conocarpus erectus (Button wood)	300
14	Peltophorum pterocarpum (Pheltophorum)	396
15	Cassia Fistula (Sarakondrai)	2
16	Deloxix regia (Gulmuhar)	16
	TOTAL	28290

TABLE C:
Tree planted details in Board Plant (Mondipatti) as on 30.09.2023

SL.		No. of Trees
NO	Name of the Tree	
1	Acrocarpus	810
2	Azadirachta indica(Neem)	954
3	Casuarina	48,796
4	Dalbergia sisoo	15,108
5	Delonix regia (Gulmour)	287
6	Eucalyptus Hybrid	30,614
7	Ficus benghalensis (Alam)	104
8	Ficus religiosa (Arasu)	108
9	Fishtail palm	53
10	Lagerstroemia	34
11	Tectona grandis	637
12	Ficus Racemosa	10
13	Terminalia arjuna	100
14	Bauhinia purpurea	391
15	Thespesia populnea	95
16	Simarouba glauca	95
17	Conocarpus erectus	319
18	Millettia pinnata (Pungan)	500
19	Millingtonia hortensis	215
20	Mimusops elengi (Magilam)	200
21	Muntingia calabura (Singapur jerry)	200
22	Peltophorum pterocarpum	142
23	Terminalia catappa	370
24	Fishtail palm	110
25	Terminalia Mantaly	25
26	Albizia lebbeck	28
27	Samanea saman(Rain Tree)	285
	TOTAL	100590

TABLE D:
Tree planted details in Additional Area in Chetttichatram & K. Periyapatti as on 30.09.2023

S.No	Name of the Tree	No. of Trees
1	Acacia auriculiformis	10673
2	Aalamaram	209
3	Acacia Hybrid	28214
4	Amla / Naaval	3056
5	Arasu	65
6	Ashoka	1
7	Badam	2380
8	Bamboo	12881
9	Black pearl tree	5
10	Casai Siamia	4760
11	Cashewnut/Simaruba	2756
12	Casuarina equisetifolia	35154
13	Casuarina hybrid	221657
14	Casuarina junghuhniana	72953
15	Coconut (AT)	799
16	Coconut (D x T)	302
17	Coconut (Dwarf-Orange)	482
18	Coconut (ECT)	1839
19	Coconut (T x D)	1625
20	Coconut (WCT)	448
21	Croscentia cujete	5
22	Eucalyptus Hybrid	55811
23	Gmelina arborea	240
24	Guava/ Jack/ pithcelobium/Lemon	5905
25	Gulmohar	212
26	Iluppai	211
27	Kadam	15551
28	Karungali	8
29	Khaya	9150
30	Leuceana	10060
31	Mahagony	10871
32	Mango	10000
33	Melia	28385
34	Neem	11395
35	Neer marudhu	5335
36	Night queen tree	5
37	Noni maram	5

38	Peltophorum	30
39	Pomegranate	2000
40	Poovarasu/Pungan	6557
41	Punnai	5
42	Puthrajeevi	5
43	Red sandal	3000
44	Rose wood	2740
45	Sandal	2271
46	Sappota /Seethapal	907
47	Silk cotton	2200
48	Silver Oak	700
49	Sissoo	64645
50	Soap nut	5
51	Star fruit	5
52	Tamarind	2975
53	Teak	20963
54	Vagai	2777
55	Vasambu	5
56	Vengai	800
57	Water apple	5
58	Banana	3500
59	Conocarpus erectus	450
60	Khaya anthotheca	500
61	Vachellia nilotica	200
62	Madhuca longifolia	400
63	Terminalia bellirica	1850
	Grand Total	6,82,903

## View on Flora



Coconut plantation (Cocus nucifera)



Teak (Tectona grandis)



Arjun Tree (Terminalia arjuna)



African mahogany (Khaya scenegalensis)



Pungan (Millettia pinnata)



Butter Tree (Madhuca longifolia)



Casuarina (Casuarina sps)



Guava (Psidium gujava)



Sapota (Manilkara zapota)



Mango (Mangifera indica)



Badham (Terminalia catapa)



Eucalyptus (Eucalyptus sps)



Neolamarckia cadamba (Cadambam)



Thespesia populnea (Poovarasu)



Acacia mangium (Mangium)



Cassia siamina (Manjalkonrai)

# **View of Herbs**



Sickle bush



Jackal jujube

# View of Fauna



**Cat Snake** 



**Grey slender loris** 







Camelian



Bar-headed goose



Black winged stilt



Shikra



Peacock pansy



Saw-scaled viper



Road Avenue (Elephant Ear Trees)



Wet land habitat for birds



Wet land habitat for birds

RED

CONSENT ORDER NO. 2106230724262 DATED: 11/08/2021.

### PROCEEDINGS NO.T3/TNPCB/F.0142TRY/RL/TRY/A/2021 DATED: 11/08/2021

SUB: TNPC Board-Consent for Establishment FOR EXPANSION- I TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT), S.F. No. MONDIPATTI VILLAGE:1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A& 2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1&2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A& 6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D,3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B& 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B&2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to1C, 7/2, 3, 4A, 4B, 5A, 5B & 6, 59/1-A&2 to 4, 60, 61/1&2,70/1&2, MONDIPATTY Village, Manappaarai Taluk, Thiruchirapalli District- for the establishment or take steps to establish the industry for Expansion under Section 21 of the Air(Prevention and control of Pollution)Act,1981, as amended in 1987 (Central Act, 14 of 1981)-Issued- Reg.

**REF:** 1.Unit's application No. 30724262, dated 27-02-2020 & 24-02-2021

2.IR.No : F.0142TRY/RL/JCEE-M/TRY/2021 dated 26/02/2021

3.Board's (Technical Sub Committee) Resolution Item No.187-02, dated 29.07.2021.

Consent to establish or take steps to establish for Expansion is hereby granted under Section 21 of the Air (Prevention and control of Pollution) Act,1981, as amended in 1987 and the Rules and Orders made there under to

CHIEF GENERAL MANAGER (BOARD PLANT),

M/s . TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT)

Authorizing occupier to establish or take steps to establish the industry in the site mentioned below:

S.F No.MONDIPATTI VILLAGE: 1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to 10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A& 2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1& 2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A&

6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D,3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B& 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B& 2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to 1C, 7/2, 3, 4A, 4B, 5A, 5B & 6, 59/1-A& 2 to 4, 60, 61/1&2,70/1&2,

MONDIPATTY Village,

Manappaarai Taluk,

Thiruchirapalli District.

This Consent to establish for Expansion is valid upto March 31, 2026, or till the industry obtains consent to operate under Section 21 of the Air (Prevention and control of Pollution) Act, 1981, as amended in 1987 whichever is earlier subject to special and general conditions enclosed.

RATNAM VIJAYABASKARAN Digitally signed by RATNAM VIJAYABASKARAN Date: 2021.08.12 14:57:28 +05'30'

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

То

CHIEF GENERAL MANAGER (BOARD PLANT),

M/s.TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT),

Tamilnadu Newsprint and Papers Limited,

UNIT-II (PAPER BOARD UNIT)

Mondipatty, K. Periyapatti & Chettichathram villages, Manapparai Taluk, Thiruchirapalli District,

Pin: 621306

# Copy to:

- $1. The\ Commissioner,\ MANAPPARAI-Panchayat\ Union,\ Manappaarai\ Taluk,\ Thiruchirapalli\ District\ .$
- $2.\ The\ District\ Environmental\ Engineer,\ Tamil\ Nadu\ Pollution\ Control\ Board,\ THIRUCHIRAPALLI.$
- 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.
- 4. File

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## CONSENT ORDER NO. 2106130724262 DATED: 11/08/2021.

### PROCEEDINGS NO.T3/TNPCB/F.0142TRY/RL/TRY/W/2021 DATED: 11/08/2021

SUB: TNPC Board-Consent for Establishment FOR EXPANSION- I TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT), S.F. No. MONDIPATTI VILLAGE:1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A& 2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1&2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A& 6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D,3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B& 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B&2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to1C, 7/2, 3, 4A, 4B, 5A, 5B & 6, 59/1-A&2 to 4, 60, 61/1&2,70/1&2, MONDIPATTY Village, Manappaarai Taluk, Thiruchirapalli District- for the establishment or take steps to establish the industry for Expansion under Section 25 of the Water(Prevention and control of Pollution)Act,1974, as amended in 1988 (Central Act 6 of 1974) –Issued- Reg.

**REF:** 1.Unit's application No. 30724262, dated 27-02-2020 & 24-02-2021

2.IR.No: F.0142TRY/RL/JCEE-M/TRY/2021 dated 26/02/2021

3.Board's (Technical Sub Committee) Resolution Item No.187-02, dated 29.07.2021.

Consent to establish or take steps to establish for Expansion is hereby granted under Section 25 of the Water (Prevention and control of Pollution) Act,1974, as amended in 1988(Central Act 53 of 1988) (hereinafter referred to as 'The Act') and the Rules and Orders made there under to

CHIEF GENERAL MANAGER (BOARD PLANT),
M/s. TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT)

Authorizing occupier to establish or take steps to establish the industry in the site mentioned below:

S.F. No.MONDIPATTI VILLAGE: 1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A& 2B, 465/1A to 1E, 2A &2B, 466/1&2,

467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1& 2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A& 6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D, 3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B& 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B& 2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to 1C, 7/2, 3, 4A, 4B, 5A, 5B & 6, 59/1-A& 2 to 4, 60, 61/1&2,70/1&2,

MONDIPATTY Village,

Manappaarai Taluk,

Thiruchirapalli District.

This Consent to establish for Expansion is valid upto March 31, 2026, or till the industry obtains consent to operate under Section 25 of the Water (Prevention and control of Pollution) Act, 1974, as amended in 1988 whichever is earlier subject to special and general conditions enclosed.

RATNAM VIJAYABASKARAN Digitally signed by RATNAM VIJAYABASKARAN Date: 2021.08.12 15:00:02 +05'30'

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

То

CHIEF GENERAL MANAGER (BOARD PLANT),

M/s.TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT),

Tamilnadu Newsprint and Papers Limited,

UNIT-II (PAPER BOARD UNIT)

Mondipatty, K. Periyapatti & Chettichathram villages, Manapparai Taluk, Thiruchirapalli District,

Pin: 621306

#### Copy to:

- 1. The Commissioner, MANAPPARAI-Panchayat Union, Manappaarai Taluk, Thiruchirapalli District .
- 2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, THIRUCHIRAPALLI.
- 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.
- 4. File

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## Category of the Industry:

**RED** 



**CONSENT ORDER NO. 2207243608442** DATED: 15/07/2022.

### PROCEEDINGS NO.T3/TNPCB/F.0145TRY/RL//TRY/A/2022 DATED: 15/07/2022

SUB: Tamil Nadu Pollution Control Board -CONSENT TO OPERATE FOR EXPANSION-I -M/s. M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)-(PHASE-I), S.F.No. 39/1,39/2, Part 46/1,296,302/1,302/2A,302/2B, 302/3, 302/4, 302/5, 302/6,302/7, 302/8A, 302/8B, 302/9. 302/10, 302,11, 302/12, 302/13, 302/14, 302/15 and 302/16. , MONDIPATTY villageManappaarai Taluk and Thiruchirapalli District - Consent for operation of the plant and discharge of emissions under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987 (Central Act 14 of 1981) -Issued- Reg.

REF: 1.PROCEEDINGS NO.T3/TNPCB/F.0145TRY/RL/TRY/W&A/2021 DATED: 11/08/2021

- 2.Unit's application No. 43608442, dated 24-02-2022 & 05-07-2022 3.IR.No : F.0145TRY/RL/JCEE-M/TRY/2022 dated 05/07/2022
- 4.Board's (Technical Sub Committee) Resolution Item No.200-17, dated 11.07.2022.

CONSENT TO OPERATE FOR EXPANSION is hereby granted under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987 (Central Act 14 of 1981) (hereinafter referred to as "The Act") and the rules and orders made there under to

Chief General Manager (Board Plant)),

M/s . M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)- (PHASE-I) S.F No.39/1,39/2, Part 46/1,296,302/1,302/2A,302/2B, 302/3, 302/4, 302/5, 302/6,302/7, 302/8A, 302/8B, 302/9.

302/10, 302,11, 302/12, 302/13, 302/14, 302/15 and 302/16.,

MONDIPATTY Village,

Manappaarai Taluk,

Thiruchirapalli District.

Authorizing the occupier to operate the industrial plant in the Air Pollution Control Area as notified by the Government and to make discharge of emission from the stacks/chimneys.

This is subject to the provisions of the Act, the rules and the orders made there under and the terms and conditions incorporated under the Special and General conditions stipulated in the Consent Order issued earlier and subject to the special conditions annexed.

This CONSENT is valid for the period ending March 31, 2027

Digitally signed by RAMASAMY RAJAMANICKAM RAMASAMY RAJAMANICKAM Date: 2022.07.15 21:47:10

For Member Secretary Tamil Nadu Pollution Control Board, Chennai

То

Chief General Manager (Board Plant)),

M/s.M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)- (PHASE-I),

M/S. Tamil Nadu Newsprint and Papers Limited, 67, Mount Road, Guindy, Chennai,

Pin: 600032

# Copy to:

- 1. The Commissioner, MANAPPARAI-Panchayat Union, Manappaarai Taluk, Thiruchirapalli District .
- 2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, THIRUCHIRAPALLI.
- ${\it 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.}\\$
- 4. File

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## Category of the Industry:

**RED** 



CONSENT ORDER NO. 2207143608442 DATED: 15/07/2022.

#### PROCEEDINGS NO.T3/TNPCB/F.0145TRY/RL/TRY/W/2022 DATED: 15/07/2022

SUB: Tamil Nadu Pollution Control Board -CONSENT TO OPERATE FOR EXPANSION-I -M/s. M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)-(PHASE-I), S.F.No. 39/1,39/2, Part 46/1,296,302/1,302/2A,302/2B, 302/3, 302/4, 302/5, 302/6,302/7, 302/8A, 302/8B, 302/9. 302/10, 302,11, 302/12, 302/13, 302/14, 302/15 and 302/16. MONDIPATTY villageManappaarai Taluk and Thiruchirapalli District - Consent for the operation of the plant and discharge of sewage and/or trade effluent under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act 6 of 1974) - Issued-Reg.

REF: 1.PROCEEDINGS NO.T3/TNPCB/F.0145TRY/RL/TRY/W&A/2021 DATED: 11/08/2021

- 2.Unit's application No. 43608442, dated 24-02-2022 & 05-07-2022 3.IR.No : F.0145TRY/RL/JCEE-M/TRY/2022 dated 05/07/2022
- 4. Board's (Technical Sub Committee) Resolution Item No. 200-17, dated 11.07.2022.

CONSENT TO OPERATE FOR EXPANSION is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act, 6 of 1974) (hereinafter referred to as "The Act") and the rules and orders made there under to

Chief General Manager (Board Plant)),

M/s . M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)- (PHASE-I) S.F No.39/1,39/2, Part 46/1,296,302/1,302/2A,302/2B, 302/3, 302/4, 302/5, 302/6,302/7, 302/8A, 302/8B, 302/9.

302/10, 302,11, 302/12, 302/13, 302/14, 302/15 and 302/16.

MONDIPATTY Village,

Manappaarai Taluk,

Thiruchirapalli District.

Authorising the occupier to make discharge of sewage and /or trade effluent.

This is subject to the provisions of the Act, the rules and the orders made there under and the terms and conditions incorporated under the Special and General conditions stipulated in the Consent Order issued earlier and subject to the special conditions annexed.

This CONSENT is valid for the period ending March 31, 2027

RAMASAMY Digitally signed by RAMASAMY RAJAMANICKAM Date: 2022.07.15 21:49:17

For Member Secretary Tamil Nadu Pollution Control Board, Chennai

То

Chief General Manager (Board Plant)),

M/s.M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)- (PHASE-I),

M/S. Tamil Nadu Newsprint and Papers Limited, 67, Mount Road, Guindy, Chennai,

Pin: 600032

# Copy to:

- 1. The Commissioner, MANAPPARAI-Panchayat Union, Manappaarai Taluk, Thiruchirapalli District .
- $2.\ The\ District\ Environmental\ Engineer,\ Tamil\ Nadu\ Pollution\ Control\ Board,\ THIRUCHIRAPALLI.$
- ${\it 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.}\\$
- 4. File

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Category of the Industry:

RED



CONSENT ORDER NO. 2207243671275 DATED: 15/07/2022.

### PROCEEDINGS NO.T3/TNPCB/F.0142TRY/RL//TRY/A/2022 DATED: 15/07/2022

SUB: Tamil Nadu Pollution Control Board -CONSENT TO OPERATE FOR EXPANSION-I -M/s. TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT) - (PHASE I), S.F.No. MONDIPATTI VILLAGE:1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH) VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A& 2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1& 2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A& 6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D,3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B& 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B& 2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to 1C, 7/2, 3, 4A, 4B, 5A, 5B & 6, 59/1-A& 2 to 4, 60, 61/1&2,70/1&2, MONDIPATTY villageManappaarai Taluk and Thiruchirapalli District - Consent for operation of the plant and discharge of emissions under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987 (Central Act 14 of 1981) -Issued- Reg.

**REF:** 1.PROCEEDINGS NO.T3/TNPCB/F.0142TRY/RL/TRY/W&A/2021,DATED: 11/08/2021

2.Unit's application No. 43671275, dated 24-02-2022 & 05-07-2022

3.IR.No: F.0142TRY/RL/JCEE-M/TRY/2022 dated 05/07/2022

4.Board's (Technical Sub Committee) Resolution Item No.200-16, dated 11.07.2022.

CONSENT TO OPERATE FOR EXPANSION is hereby granted under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987 (Central Act 14 of 1981) (hereinafter referred to as "The Act") and the rules and orders made there under to

CHIEF GENERAL MANAGER (BOARD PLANT),

M/s . TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT) - (PHASE I)

S.F No.MONDIPATTI VILLAGE:1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to 10, 44/1 to 6, 45/1to 4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A& 2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1& 2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A&

6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D,3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B& 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B& 2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to 1C, 7/2, 3, 4A, 4B, 5A, 5B & 6, 59/1-A& 2 to 4, 60, 61/1&2,70/1&2,

MONDIPATTY Village,

Manappaarai Taluk,

Thiruchirapalli District.

Authorizing the occupier to operate the industrial plant in the Air Pollution Control Area as notified by the Government and to make discharge of emission from the stacks/chimneys.

This is subject to the provisions of the Act, the rules and the orders made there under and the terms and conditions incorporated under the Special and General conditions stipulated in the Consent Order issued earlier and subject to the special conditions annexed.

This CONSENT is valid for the period ending March 31, 2027

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

То

CHIEF GENERAL MANAGER (BOARD PLANT),

M/s.TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT) - (PHASE I),

Tamilnadu Newsprint and Papers Limited,

UNIT-II (PAPER BOARD UNIT)

Mondipatty, K. Periyapatti & Chettichathram villages, Manapparai Taluk, Thiruchirapalli District,

Pin: 621306

### Copy to:

- 1. The Commissioner, MANAPPARAI-Panchayat Union, Manappaarai Taluk, Thiruchirapalli District .
- 2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, THIRUCHIRAPALLI.
- 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.
- 4. File

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# SPECIAL CONDITIONS

1. This consent to operate for Expansion is valid for operating the facility for the manufacture of products (Col. 2) at the rate (Col. 3) mentioned below. Any change in the products and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Sl. No.	Description	Quantity	Unit			
	Product Details					
1.	Paper Board	200000	MT/Annum			
2.	ECF (Elemental Chlorine Free) Chemical Wood Pulp	140000	MT/Annum			
	By-Product Details					
1.	NIL	0				
	Intermediate Product Details					
1.	Black Liquor from Pulpmill	1100	TPD			
2.	Lime Mud from Chemical Recovery plant	250	TPD			

2. This consent to operate for Expansion is valid for operating the facility with the below mentioned emission/noise sources along with the control measures and/or stack. Any change in the emission source/control measures/change in stack height has to be brought to the notice of the Board and fresh consent/Amendment has to be obtained.

I	Point source emission with sta	ck:		
Stack No.	Point Emission Source	Air pollution Control measures	Stack height from Ground Level in m	Gaseous Discharge in Nm3/hr
RB1	Chemical Recovery Boiler Stack	ESP with stack	90	165960
LK1	Lime Kiln Stack	ESP with stack	54.8	42120
II	Fugitive/Noise emission :			
Sl. No.	Fugitive or Noise Emission sources	Type of emission	Control measures	
1.	Board Machine Operation	Noise	Closed enclosure for Board Machine	
2.	Steam exhaust lines	Noise	Silencers	
3.	Chipper House Area	Fugitive	Dust suppression system/Foggi ng system	
4.	Noise emitting equipments- Paper Board Machine area	Noise	Inbuilt acoustic enclosure provided	
5.	Noise emitting equipments - Chipper House area	Noise	Inbuilt acoustic enclosure provided	
6.	Noise emitting equipments - Pulp Mill & SRP area	Noise	Inbuilt acoustic enclosure provided	
7.	Turbo pumps in the Paper Board Machine floor	Noise	Inbuilt acoustic enclosure provided	

3(a). The emission shall not contain constituents in excess of the tolerance limits as laid down hereunder:

| Sl. | Parameter | Unit | Tolerance limits | (1) (2) (3) (4) (5) (6) |

<sup>3.(</sup>b) The Ambient Air in the industrial plant area shall not contain constituents in excess of the tolerance limits prescribed below.

Sl.	Pollutant	Time Weighted	Unit	Toleran	ce Limits
No.		Average		Industrial, Residential, Rural and other area	Ecologically Sensitive Area (notified by Central Govt.)
1.	Sulphur Dioxide (SO2)	Annual 24 hours	microgram/m3 microgram/m3	50 80	20 80
2.	Nitrogen Dioxide (NO2)	Annual 24 hours	microgram/m3 microgram/m3	40 80	30 80
3.	Particulate Matter (Size Less than 10 micro M) or PM10	Annual 24 hours	microgram/m3 microgram/m3	60 100	60 100
4.	Particulate Matter (Size Less than 2.5 micro M ) or PM2.5	Annual 24 hours	microgram/m3 microgram/m3	40 60	40 60
5.	Ozone (O3)	Annual 24 hours	8 Hours 1 Hour	100 180	100 180
Sl. No.	Pollutant	Time Weighted Average	Unit	Tolerance Limits	Industrial, Residential, Rural and other area
					Ecologically Sensitive Area (notified by Central Govt.)
6.	Lead (Pb)	Annual 24 hours	microgram/m3 microgram/m3	0.5 1.0	0.5 1.0
7.	Carbon Monoxide (CO)	8 Hours 1 Hour	miligram/m3 miligram/m3	02 04	02 04
8.	Ammonia (NH3)	Annual 24 hours	microgram/m3 microgram/m3	100 400	100 400
9.	Benzene (C6H6)	Annual	microgram/m3	5	5
10.	Benzo(O) Pyrene (BaP) –particulate phase only	Annual	nanogram/m3	01	01
11.	Arsenic (As)	Annual	nanogram/m3	06	06
12.	Nickel (Ni)	Annual	nanogram/m3	20	20

3(c) The Ambient Noise Level in the industrial plant area shall not exceed the limits prescribed below:

Limits in L.eqdB(A)	Day Time	Night Time
IndustrialArea	75	70

- 4. All units of the Air pollution control measures shall be operated efficiently and continuously so as to achieve the standards prescribed in Sl. No.3 above.
- 5. The occupier shall not change or alter quality or quantity or the rate of emission or replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in change in quality and/or quantity of emissions without the previous written permission of the Board.
- 6. The occupier shall maintain log book regarding the stack monitoring system or operation of the plant or any other particulars for each of the unit operations of air pollution control systems to reflect the working condition which shall be furnished for verification of the Board officials during inspection.

- 7. The occupier shall at his own cost get the samples of emission/air/noise levels collected and analyzed by the TNPC Board Laboratory once in every 6 months/once in a year/periodically for the parameters as prescribed.
- 8. Any upset condition in any of the plants of the factory which is likely to result in increased emissions and result in violation of the standards mentioned in Sl.No.3 shall be reported to the Member Secretary / Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
- 9. The occupier shall always comply and carryout the order/directions issued by the Board in this Consent Order and from time to time without any negligence. The occupier shall be liable for action as per provisions of the Act in case of non compliance of any order/directions issued.

## **Special Additional Conditions:**

- i. The unit shall install the approved retrofit emission control device/equipment with at least 70% Particulate matter reduction efficiency on all DG sets with capacity of 125 KVA and above or otherwise the unit shall be shift to gas based generators within the time frame prescribed in the notification No. TNPCB/Labs/DD(L)02151/2019 dated 10.06.2020 issued by TNPCB.
- ii. The unit shall obtain No Objection Certificate (NOC) from the Tamil Nadu Bio Diversity Board /National Bio Diversity Authority if the unit is using any Biological resources or knowledge associated thereto as per the provisions of Biological Diversity Act 2002.

## **Additional Conditions:**

- 1. The unit shall maintain and operate the equipments and APC measures for Phase I of the Expansion activity
- 2. The unit shall install non condensable gas collection and destruction system to mitigate all malodourous gases emitted within 3 months time as committed by the unit.
- 3. The unit shall provide adsorption system followed by wet scrubber system for deodorisation purpose in the pulp section and odour destruction system in chemical recovery plant within 3 months time as committed.
- 4. The unit shall identify all sources of odour pollution and odorous compound emitted from the process/utility and shall provide appropriate odour control measures.
- 5. The unit shall operate and maintain the Air Pollution Control measures efficiently and continuously so as to achieve the emission/ AAQ standards prescribed by the Board.
- 6. The unit shall adhere to Ambient Noise Level standards prescribed by the Board.
- 7. The unit shall connect the online continuous emission monitoring system provided for the parameters PM, NOx, SOx in the recovery boiler and the parameter PM in the lime kiln to the CAC, TNPCB, Chennai and CPCB server within a month time.
- 8. The unit shall provide online continuous emission monitoring system for the parameter H2S in the recovery boiler and NOX, SOX and H2S in the lime kiln and connect the same to the CAC, TNPCB, Chennai and CPCB server within three months time.
- 9. The unit shall ensure the connectivity of the CAAQMS for the parameters PM10, PM2.5,NOx, SO2and CO with CAC of TNPCB, Guindy, Chennai and provide proper data at all times.

  10. The unit shall provide additional 1 No of CAAQMS for the parameters to monitor the parameters
- 10. The unit shall provide additional 1 No of CAAQMS for the parameters to monitor the parameters PM2.5, PM10, SOx, NOx, H2S, CH4, Cl2, HCNM, and HCT in the down wind direction and connect the same to the CAC, TNPCB, Chennai within six months time.
- 11. All the recommendations made in the CREP for pulp and paper sector shall be strictly implemented.
- 12. The unit shall continue to develop and maintain the green belt within the premises and furnish green belt area ear marked/developed in the unit premises and furnish photographs every year.
- 13. The unit's activity shall not invite any public complaint.

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

## **GENERAL CONDITIONS**

- 1. The occupier shall make an application along with the prescribed consent fee for grant of renewal of consent at least 60 days before the date of expiry of this Consent Order along with all the required particulars ensuring that there is no change in production quantity and emission.
- 2. This Consent is given by the Board in consideration of the particulars given in the application. Any change or alteration or deviation made in actual practice from the particulars furnished, in the application will also be ground for review/variation/revocation of the Consent Order under Section 21 of the Act.
- 3. The conditions imposed shall continue in force until revoked under Section 21 of the Act.
- 4. After the issue of this order, all the 'Consent to Operate' orders issued previously under Air (Prevention and Control of Pollution) Act, 1981 as amended stands defunct.
- 5. The occupier shall maintain an Inspection Register in the factory so that the inspecting officer shall record the details of the observations and instructions issued to the unit at the time of inspection for adherence.
- 6. The occupier shall provide and maintain an alternate power supply along with separate energy meter for the Air Pollution Control measures sufficient to ensure continuous operation of all pollution control equipments to ensure compliance.
- 7. The occupier shall provide all facilities to the Board officials for collection of samples in and around the factory at any time.
- 8. The applicant shall display the flow diagram of the sources of emission and pollution control systems provided at the site.
- 9. The liquid effluent arising out of the operation of the air pollution control equipment shall also be treated in a manner and to the satisfaction of standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 as amended.
- 10. The air pollution control equipments, location of inspection chambers and sampling port holes shall be made easily accessible at all time.
- 11. In case of any episodal discharge of emission, the industry shall take immediate action to bring down the emission within the limits prescribed by the Board.
- 12. If applicable, the occupier has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances.
- 13. The issuance of this consent does not authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any natural watercourse or in Government Poromboke lands.
- 14. The issuance of this Consent does not convey any property right in either real personal property or any exclusive privileges, nor does it authorize any injury to private property or Government property or any invasion of personal rights nor any infringement of Central, State laws or regulation.
- 15. The occupier shall forth with keep the Board informed of any accident of unforeseen act or event of any poisonous, noxious or polluting matter or emissions are being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
- 16. If due to any technological improvements or otherwise the Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any treatment system, either in whole or in part) the Board shall, after giving the applicant an opportunity of being heard, vary all or any of such conditions and thereupon the applicant shall be bound to comply with the conditions as so varied.
- 17. In case there is any change in the constitution of the management, the occupier of the new management shall file fresh application under Air (Prevention and Control of Pollution) Act, 1981, as amended in Form-I alongwith relevant documents of change of management immediately and get the necessary amendment with renewal of consent order.
- 18. In case there is any change in the name of the company alone, the occupier shall inform the same with relevant documents immediately and get the necessary amendments for the change of name from the Board.

	For Member Secre Tamil Nadu Pollution Co Chennai	etary, ntrol Board,

Category of the Industry:

RED



CONSENT ORDER NO. 2207143671275 DATED: 15/07/2022.

## PROCEEDINGS NO.T3/TNPCB/F.0142TRY/RL/TRY/W/2022 DATED: 15/07/2022

SUB: Tamil Nadu Pollution Control Board -CONSENT TO OPERATE FOR EXPANSION-I -M/s. TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT) - (PHASE I), S.F.No. MONDIPATTI VILLAGE:1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A& 2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1& 2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A& 6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D,3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B& 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B& 2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to 1C, 7/2, 3, 4A, 4B, 5A, 5B & 6, 59/1-A& 2 to 4, 60, 61/1&2,70/1&2, MONDIPATTY villageManappaarai Taluk and Thiruchirapalli District - Consent for the operation of the plant and discharge of sewage and/or trade effluent under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act 6 of 1974) - Issued-Reg.

**REF:** 1.PROCEEDINGS NO.T3/TNPCB/F.0142TRY/RL/TRY/W&A/2021,DATED: 11/08/2021

2.Unit's application No. 43671275, dated 24-02-2022 & 05-07-2022

3.IR.No: F.0142TRY/RL/JCEE-M/TRY/2022 dated 05/07/2022

4.Board's (Technical Sub Committee) Resolution Item No.200-16, dated 11.07.2022.

CONSENT TO OPERATE FOR EXPANSION is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act, 6 of 1974) (hereinafter referred to as "The Act") and the rules and orders made there under to

CHIEF GENERAL MANAGER (BOARD PLANT),

M/s . TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT) - (PHASE I) S.F No.MONDIPATTI VILLAGE: 1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1 to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to 10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 406/1&2, 467, 468/1 to 3, &3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A& 2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3,

470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1& 2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A& 6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D,3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B& 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B& 2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to 1C, 7/2, 3, 4A, 4B, 5A, 5B & 6, 59/1-A& 2 to 4, 60, 61/1&2,70/1&2,

MONDIPATTY Village,

Manappaarai Taluk,

Thiruchirapalli District.

Authorising the occupier to make discharge of sewage and /or trade effluent.

This is subject to the provisions of the Act, the rules and the orders made there under and the terms and conditions incorporated under the Special and General conditions stipulated in the Consent Order issued earlier and subject to the special conditions annexed.

This CONSENT is valid for the period ending March 31, 2027

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

То

CHIEF GENERAL MANAGER (BOARD PLANT),

M/s.TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT) - (PHASE I),

Tamilnadu Newsprint and Papers Limited,

UNIT-II (PAPER BOARD UNIT)

 $Mondipatty,\,K.\,\,Periyapatti\,\,\&\,\,Chettichathram\,\,villages,\,Manapparai\,\,Taluk,\,Thiruchirapalli\,\,District\,\,,$ 

Pin: 621306

## Copy to:

- $1. The\ Commissioner,\ MANAPPARAI-Panchayat\ Union,\ Manappaarai\ Taluk,\ Thiruchirapalli\ District\ .$
- 2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, THIRUCHIRAPALLI.
- 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.
- 4. File

# SPECIAL CONDITIONS

1. This consent to operate for Expansion is valid for operating the facility for the manufacture of products (Col. 2) at the rate (Col. 3) mentioned below. Any change in the products and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Sl. No.	Description	Quantity	Unit		
	Product Details				
1.	Paper Board	200000	MT/Annum		
2.	ECF (Elemental Chlorine Free) Chemical Wood Pulp	140000	MT/Annum		
	By-Product Details				
1.	NIL	0			
	Intermediate Product Details				
1.	Black Liquor from Pulpmill	1100	TPD		
2.	Lime Mud from Chemical Recovery plant	250	TPD		

2. This consent to operate for Expansion is valid for operating the facility with the below mentioned permitted outlets for the discharge of sewage/trade effluent. Any change in the outlets and the quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Outlet No.	<b>Description of Outlet</b>	Maximum daily discharge in KLD	Point of disposal				
Effluent Ty	Effluent Type : Sewage						
1.	Sewage#1 (STPs)	60.0	On land for gardening				
2.	Sewage#2 (Septic Tanks)	30.0	On Industrys own land				
Effluent Ty	pe : Trade Effluent						
1.	Trade Effluent #1	8480.0	On land for irrigation				
2.	Trade Effluent #2	1000.0	Recycling to process				
3.	Trade Effluent #3	1115.0	UF/ RO Reject recycled to WTP				
4.	Trade Effluent #4	20.0	DM Plant backwash & regeneration waste water reused for dust suppression				

3. The effluent discharge shall not contain constituents in excess of the tolerance Limits as laid down hereunder.

Sl.	Parameters	Unit	TOLERA	ANCE LIMIT	TS - OUTLETS -Nos
No.			Sewage	Trade Eff	fluent
			1&2	1	2,3&4
1.	рН		5.5 to 9	5.5 to 9	5.5 to 9
2.	Temperature	оС	-	-	shall not exceed 5°C above the receiving water temperature
3.	Particle size of Suspended solids	-	-	-	shall pass 850 micron IS sieve
4.	Total Suspended Solids	mg/l	30	200	100
5.	Total Dissolved solids (inorganic)	mg/l	-	2100	2100
6.	Oil & Grease	mg/l	-	10	10
7.	Biochemical Oxygen Demand (3 days at 27oC)	mg/l	20	100	30
8.	Chemical Oxygen Demand	mg/l	-	-	250
9.	Chloride (as Cl)	mg/l	-	600	1000
10.	Sulphates (as SO4)	mg/l	-	1000	1000
11.	Total Residual Chlorine	mg/l	-	-	1
12.	Ammonical Nitrogen (as N)	mg/l	-	50	50
13.	Total Kjeldahl Nitrogen (as N)	mg/l	-	-	100
14.	Free Ammonia (as NH3)	mg/l	-	_	5
15.	Arsenic (as As)	mg/l	-	0.2	0.2
16.	Mercury (as Hg)	mg/l	-	0.01	0.01
17.	Lead (as Pb)	mg/l	-	1	0.1
18.	Cadmium(as Cd)	mg/l	-	1	2
19.	Hexavalent Chromium (as Cr+6)	mg/l	-	1	0.1`
20.	Total Chromium (as Cr)	mg/l	-	2	2
21.	Copper (as Cu)	mg/l	-	3	3
22.	Zinc (as Zn)	mg/l	-	1.5	1
23.	Selenium (as Se)	mg/l	-	0.05	0.05
24.	Nickel (as Ni)	mg/l	-	3	3
25.	Boron (as B)	mg/l	-	2	2
26.	Percent Sodium	%	-	60	-
27.	Residual Sodium Carbonate	mg/l	-	5	-
28.	Cyanide (as CN)	mg/l	-	0.2	0.2
29.	Fluoride (as F)	mg/l	-	2	2
30.	Dissolved Phosphates(as P)	mg/l	-	-	5
31.	Sulphide (as S)	mg/l	-	2	2
32.	Pesticides	mg/l	-		1
33.	Phenolic Compounds (as C6H5OH)	mg/l	-	5	1
34.	Radioactive materials a) Alpha emitters	micro curie/ml	-	10-8	10-7

35.	Radioactive materials b). Beta emitters	micro curie/ml	-	10-6	10-6	
36.	Fecal Coliform	MPN/100ml	-	•	-	

- 4. All units of the sewage and Trade effluent treatment plants shall be operated efficiently and continuously so as to achieve the standards prescribed in Sl No.3 above or to achieve the zero liquid discharge of effluent as applicable.
- 5. The occupier shall maintain the Electro Magnetic Flow Meters/water Meters installed at the inlet of the water supply connection for each of the purposes mentioned below for assessing the quantity of water used and ensuring that such meters are easily accessible for inspection and maintenance and for other purposes of the Act.
  - a. Industrial Cooling, Spraying in mine pits or boiler feed.
  - b. Domestic purpose.
  - c. Process.
- 6. The occupier shall maintain the Electro Magnetic Flow Meters with computer recording arrangement for measuring the quantity of effluent generated and treated for the monitoring purposes of the Act.
- 7. Log book for each of the unit operations of ETP have to be maintained to reflect the working condition of ETP along with the readings of the Electro Magnetic Flow Meters installed to assess effluent quantity and the same shall be furnished for verification of the Board officials during inspection.
- 8. The occupier shall at his own cost get the samples of effluent/surface water/ground water collected in and around the unit by Board officials and analyzed by the TNPC Board Laboratory periodically.
- 9. Any upset condition in any of the plants of the factory which is, likely to result in increased effluent discharge and result in violation of the standards mentioned in Sl. No.3 above shall be reported to the Member Secretary / Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
- 10. The occupier shall always comply and carryout the order/directions issued by the Board in this Consent Order and from time to time without any negligence. The occupier shall be liable for action as per provisions of the Act in case of non compliance of any order/directions issued.
- 11. The occupier shall develop adequate width of green belt at the rate of 400 numbers of trees per Hectare.
- 12. The occupier shall provide and maintain rain water harvesting facilities.
- 13. The occupier shall ensure that there shall not be any discharge of effluent either treated or untreated into storm water drain at any point of time.
- 14. In the case of zero liquid discharge of effluent units, the occupier shall adhere the following conditions as laid under.
  - i). The occupier shall ensure zero liquid discharge of effluent, thereby no discharge of untreated / treated effluent on land or into any water bodies either inside or outside the premises at any point of time.
  - ii) The occupier shall operate and maintain the Zero liquid discharge treatment components comprising of Primary, Secondary and tertiary treatment systems at all times and ensure that the RO permeate/Evaporator condensate shall be recycled in the process and the final RO reject shall be disposed off with the reject management system ensuring zero liquid discharge of effluents in the premises.
  - iii) The occupier shall operate and maintain the reject management system effectively and recover the salt from the system which shall be reused in the process if reusable or shall be disposed off as ETP sludge.
  - iv) In case of failure to achieve zero discharge of effluents for any reason, the occupier shall stop its production and operations forthwith and shall be reported to the Member Secretary/Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
  - v) The occupier shall restart the production only after ascertaining that the Zero discharge treatment system can perform effectively for achieving zero discharge of effluents.

## **Special Additional Conditions:**

The unit shall obtain No Objection Certificate (NOC) from the Tamil Nadu Bio Diversity Board /National Bio Diversity Authority if the unit is using any Biological resources or knowledge associated thereto as per the provisions of Biological Diversity Act 2002.

### **Additional Conditions:**

- 1. The unit shall not exceed the consented production capacity and the generation of sewage and trade effluent.
- 2. The unit shall operate and maintain all the components of STP for the treatment of sewage efficiently and continuously and the treated sewage shall be utilized on industry's own land for gardening after satisfying the standards prescribed by the Board.
- 3. The unit shall operate and maintain the existing ETP (9MLD) and new ETP for Expansion (15 MLD) efficiently and continuously for the treatment of trade effluent generated from this unit and the treated trade effluent shall be utilized for irrigation/recycled in its process after satisfying the standards prescribed by the Board. The unit shall utilize the treated trade effluent for irrigation purposes on its irrigation lands earmarked for the purposes.
- 4. The unit shall install EMFM at the raw water inlet pipe and also at appropriate locations so as to assess the quantity of trade effluent generated, treated and disposed for various purposes.
- 5. The unit shall ensure that, under any circumstances does not discharge either treated or untreated trade effluent into nearby water bodies / private lands / outside the premises of the unit either directly or indirectly.
- 6. The unit shall comply with the Guidelines for Utilization of Treated Effluent in Irrigation issued by CPCB during September 2019
- 7. The unit shall ensure that utilization of treated trade effluent for green belt development shall not pollute the soil and ground water in and around the project area either directly or indirectly under any circumstances.
- 8. The unit shall maintain log book with proper entries for receipt of raw materials, chemicals used for process, quantity of water usage, quantity of effluent from all sources separately, solid waste generation/storage/disposal and quantity of product manufactured.
- 9. All pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted in to the effluent collection system only and shall not be allowed to find their way to storm water drains or open areas.
- 10. The unit shall provide suitable arrangements for surface runoff, if any, will be collected and disposed through storm water drains.
- 11. The unit shall collect the water samples from 16 Nos. of piezo metric wells provided at the land areas earmarked for utilizing treated trade effluent and analyze the same so as to monitor ground water quality and furnish report to Board.
- 12. The unit shall furnish the annual report regarding monitoring of land earmarked for utilising the treated trade effluent, obtained from TNAU on a yearly basis and shall comply with the recommendations made in the annual report of TNAU.
- 13. The unit shall maintain the online continuous monitor for effluent parameters flow, pH, BOD, COD and TSS and ensure the connectivity with Water Quality Watch of TNPCB at all times.
- 14. All the recommendations made in the CREP for pulp and paper sector shall be strictly implemented.
- 15. The unit shall comply with the conditions stipulated in the Hazardous Waste Authorization obtained under Hazardous and Other Waste (M&TM) Rules, 2016 and the hazardous wastes generated shall be properly handled and disposed as per the said Rules.
- 16. The unit shall collect and dispose the non-hazardous solid wastes then and there without accumulating inside the premises.
- 17. The unit shall comply with the conditions stipulated in the environmental clearance obtained from the MoEF &CC, New Delhi vide F.No.J-11011/172/2017-IA-II(I) dated 04.04.2019.

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

## **GENERAL CONDITIONS**

- 1. The occupier shall make an application along with the prescribed consent fee for grant of renewal of consent at least 60 days before the date of expiry of this Consent Order along with all the required particulars ensuring that there is no change in Production quantity and change in sewage/Trade effluent.
- 2. This Consent is issued by the Board in consideration of the particulars given in the application. Any change or alteration or deviation made in actual practice from the particulars furnished in the application will also be ground for review/variation/revocation of the Consent Order under Section 27 of the Act and to make such variation as deemed fit for the purpose of the Act.
- 3. The consent conditions imposed in this order shall continue in force until revoked under Section 27(2) of the Act.
- 4. After the issue of this order, all the 'Consent to Operate' orders issued previously under Water (Prevention and Control of Pollution) Act, 1974 as amended stands defunct.
- 5. The occupier shall maintain an Inspection Register in the factory so that the inspecting officer shall record the details of the observations and instructions issued to the unit at the time of inspection for adherence.
- 6. The occupier shall provide and maintain an alternate power supply along with separate energy meter for the Effluent Treatment Plant sufficient to ensure continuous operation of all pollution control equipments to maintain compliance.
- 7. The occupier shall provide all facilities to the Board officials for inspection and collection of samples in and around the factory at any time.
- 8. The occupier shall display the flow diagram of the sources of effluent generation and pollution control systems provided at the ETP site.
- 9. The solid waste such as sweepings, wastage, package, empty containers, residues, sludge including that from air pollution control equipments collected within the premises of the industrial plant shall be collected in an earmarked area and shall be disposed off properly.
- 10. The occupier shall collect, treat the solid wastes like food waste, green waste generated from the canteen and convert into organic compost.
- 11. The occupier shall segregate the Hazardous waste from other solid wastes and comply in accordance with Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- 12. The occupier shall maintain good house-keeping within the factory premises.
- 13. All pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted into the trade effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
- 14. The occupier shall ensure that there shall not be any diversion or by-pass of trade effluent on land or into any water sources.
- 15. The occupier shall ensure that solar Evaporation pans shall be constructed in such a way that the bottom of the solar pan is at least 1 m above the Ground level (if applicable).
- 16. The occupier shall furnish the following returns in the prescribed formats to the concerned District office regularly.
  - a) Monthly water consumption returns of each of the purposes with water meter readings in Form-I on or before 5th of every month.
  - b) Yearly return on Hazardous wastes generated and accumulated for the period from 1st April to 31st March in Form–4 before the end of the subsequent 30th June of every year (if applicable). c) Yearly Environmental Statement for the period from 1st April to 31st March in Form –V before the
  - c) Yearly Environmental Statement for the period from 1st April to 31st March in Form –V before the end of the subsequent 30th September of every year(if applicable).
- 17. If applicable, the occupier has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances.
- 18. The issuance of this consent does not authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any natural watercourse or in Government Poromboke lands.
- 19. The issuance of this Consent does not convey any property right in either real personal property or any exclusive privileges, nor does it authorize any injury to private property or Government property or any invasion of personal rights nor any infringement of Central, State laws or regulation.

- 20. The occupier shall forth with keep the Board informed of any accident of unforeseen act or event of any poisonous, noxious or polluting matter or emissions are being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
- 21. If due to any technological improvements or otherwise the Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any treatment system, either in whole or in part) the Board shall, after giving the applicant an opportunity of being heard, vary all or any of such conditions and thereupon the applicant shall be bound to comply with the conditions as so varied.
- 22. In case there is any change in the constitution of the management, the occupier of the new management shall file fresh application under Water (Prevention and Control of Pollution) Act, 1974, as amended in Form-II alongwith relevant documents of change of management immediately and get the necessary amendment with renewal of consent order.
- 23. In case there is any change in the name of the company alone, the occupier shall inform the same with relevant documents immediately and get the necessary amendments for the change of name from the Board.
- 24. The occupier shall display this consent order granted to him in a prominent place for perusal of the inspecting Officers of this Board.

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

## Category of the Industry:

RED



CONSENT ORDER NO. 2207243608442 DATED: 15/07/2022.

### PROCEEDINGS NO.T3/TNPCB/F.0145TRY/RL//TRY/A/2022 DATED: 15/07/2022

SUB: Tamil Nadu Pollution Control Board -CONSENT TO OPERATE FOR EXPANSION-I -M/s. M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)-(PHASE-I), S.F.No. 39/1,39/2, Part 46/1,296,302/1,302/2A,302/2B, 302/3, 302/4, 302/5, 302/6,302/7, 302/8A, 302/8B, 302/9. 302/10, 302,11, 302/12, 302/13, 302/14, 302/15 and 302/16. , MONDIPATTY villageManappaarai Taluk and Thiruchirapalli District - Consent for operation of the plant and discharge of emissions under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987 (Central Act 14 of 1981) -Issued- Reg.

REF: 1.PROCEEDINGS NO.T3/TNPCB/F.0145TRY/RL/TRY/W&A/2021 DATED: 11/08/2021

- 2.Unit's application No. 43608442, dated 24-02-2022 & 05-07-2022 3.IR.No : F.0145TRY/RL/JCEE-M/TRY/2022 dated 05/07/2022
- 4.Board's (Technical Sub Committee) Resolution Item No.200-17, dated 11.07.2022.

CONSENT TO OPERATE FOR EXPANSION is hereby granted under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981 as amended in 1987 (Central Act 14 of 1981) (hereinafter referred to as "The Act") and the rules and orders made there under to

Chief General Manager (Board Plant)),

M/s . M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)- (PHASE-I) S.F No.39/1,39/2, Part 46/1,296,302/1,302/2A,302/2B, 302/3, 302/4, 302/5, 302/6,302/7, 302/8A, 302/8B, 302/9.

302/10, 302,11, 302/12, 302/13, 302/14, 302/15 and 302/16.,

MONDIPATTY Village,

Manappaarai Taluk,

Thiruchirapalli District.

Authorizing the occupier to operate the industrial plant in the Air Pollution Control Area as notified by the Government and to make discharge of emission from the stacks/chimneys.

This is subject to the provisions of the Act, the rules and the orders made there under and the terms and conditions incorporated under the Special and General conditions stipulated in the Consent Order issued earlier and subject to the special conditions annexed.

This CONSENT is valid for the period ending March 31, 2027

For Member Secretary Tamil Nadu Pollution Control Board, Chennai

To

Chief General Manager (Board Plant)),

M/s.M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)- (PHASE-I),

M/S. Tamil Nadu Newsprint and Papers Limited, 67, Mount Road, Guindy, Chennai,

Pin: 600032

# Copy to:

- 1. The Commissioner, MANAPPARAI-Panchayat Union, Manappaarai Taluk, Thiruchirapalli District .
- 2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, THIRUCHIRAPALLI.
- ${\it 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.}\\$
- 4. File

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# SPECIAL CONDITIONS

1. This consent to operate for Expansion is valid for operating the facility for the manufacture of products (Col. 2) at the rate (Col. 3) mentioned below. Any change in the products and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Sl. No.	Description	Quantity	Unit			
	Product Details					
1.	STEAM	180	TPH			
2.	Power Generation	50	MW			

2. This consent to operate for Expansion is valid for operating the facility with the below mentioned emission/noise sources along with the control measures and/or stack. Any change in the emission source/control measures/change in stack height has to be brought to the notice of the Board and fresh consent/Amendment has to be obtained.

I	Point source emission with stack :						
Stack No.	Point Emission Source	Air pollution Control measures	Stack height from Ground Level in m	Gaseous Discharge in Nm3/hr			
1	Boiler 90TPH- 2 Nos (common stack)	ESP with stack	100	302500			
2	250KVA- DG Set	Stack	5	36			
3	Primary Screen Coal Crusher House	Dust Extraction System with Stack	13				
4	Secondary Screen Coal Crusher House	Dust Extraction System with Stack	15				
II	Fugitive/Noise emission :						
Sl. No.	Fugitive or Noise Emission sources	Type of emission	Control measures				
1.	Unloading, storing and loading operations	Fugitive	Two nos. of Coal sheds				
2.	Coal Handling area	Fugitive	Closed conveyors for a length of 2500 Meters				
3.	Coal Handling area	Fugitive	8 Nos. of sprinklers				
4.	Coal Transferring	Fugitive	Dust extraction system at Transfer Tower 1				
5.	Coal Transferring	Fugitive	Dust extraction system at Transfer Tower 2				
6.	Coal Transferring	Fugitive	Dust extraction system at Transfer Tower 4				
7.	Coal Transferring	Fugitive	Dust extraction system at Transfer Tower 3				
8.	Coal Transferring	Fugitive	Dust extraction system at Transfer Tower 5				
9.	Air Pre heater	Fugitive	Closed dust collection system				
10.	Economizers	Fugitive	Closed dust collection system				

11.	Ash handling system	Fugitive	Closed pipelines, storage silo & ash conditioner	
12.	Vehicular Movements	Fugitive	Concrete Roads & closed vehicle for transport	
13.	Air compressor	Noise	Installed in a separate room	
14.	Turbo Generator	Noise	Acoustic insulation & enclosure	
15.	Steam exhaust lines	Noise	Silencers	
16.	DG Set	Noise	Inbuilt acoustic enclosure provided	

3(a). The emission shall not contain constituents in excess of the tolerance limits as laid down hereunder:

Sl. Parameter

Unit

Tolerance limits

(1) (2) (3) (4) (5)

(6)

3.(b) The Ambient Air in the industrial plant area shall not contain constituents in excess of the tolerance limits prescribed below.

Sl.	Pollutant	Time Weighted Average	Unit	<b>Tolerance Limits</b>	
No.				Industrial, Residential, Rural and other area	Ecologically Sensitive Area (notified by Central Govt.)
1.	Sulphur Dioxide (SO2)	Annual 24 hours	microgram/m3 microgram/m3	50 80	20 80
2.	Nitrogen Dioxide (NO2)	Annual 24 hours	microgram/m3 microgram/m3	40 80	30 80
3.	Particulate Matter (Size Less than 10 micro M) or PM10	Annual 24 hours	microgram/m3 microgram/m3	60 100	60 100
4.	Particulate Matter (Size Less than 2.5 micro M ) or PM2.5	Annual 24 hours	microgram/m3 microgram/m3	40 60	40 60
5.	Ozone (O3)	Annual 24 hours	8 Hours 1 Hour	100 180	100 180

Sl. No.	Pollutant	Time Weighted Average	Unit	Tolerance Limits	Industrial, Residential, Rural and other area
					Ecologically Sensitive Area (notified by Central Govt.)
6.	Lead (Pb)	Annual 24 hours	microgram/m3 microgram/m3	0.5 1.0	0.5 1.0
7.	Carbon Monoxide (CO)	8 Hours 1 Hour	miligram/m3 miligram/m3	02 04	02 04
8.	Ammonia (NH3)	Annual 24 hours	microgram/m3 microgram/m3	100 400	100 400
9.	Benzene (C6H6)	Annual	microgram/m3	5	5
10.	Benzo(O) Pyrene (BaP) –particulate phase only	Annual	nanogram/m3	01	01
11.	Arsenic (As)	Annual	nanogram/m3	06	06
12.	Nickel (Ni)	Annual	nanogram/m3	20	20

3(c) The Ambient Noise Level in the industrial plant area shall not exceed the limits prescribed below:

Limits in L.eqdB(A)	Day Time	Night Time
IndustrialArea	75	70

- 4. All units of the Air pollution control measures shall be operated efficiently and continuously so as to achieve the standards prescribed in Sl. No.3 above.
- 5. The occupier shall not change or alter quality or quantity or the rate of emission or replace or alter the air pollution control equipment or change the raw material or manufacturing process resulting in change in quality and/or quantity of emissions without the previous written permission of the Board.
- 6. The occupier shall maintain log book regarding the stack monitoring system or operation of the plant or any other particulars for each of the unit operations of air pollution control systems to reflect the working condition which shall be furnished for verification of the Board officials during inspection.
- 7. The occupier shall at his own cost get the samples of emission/air/noise levels collected and analyzed by the TNPC Board Laboratory once in every 6 months/once in a year/periodically for the parameters as prescribed.
- 8. Any upset condition in any of the plants of the factory which is likely to result in increased emissions and result in violation of the standards mentioned in Sl.No.3 shall be reported to the Member Secretary / Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
- 9. The occupier shall always comply and carryout the order/directions issued by the Board in this Consent Order and from time to time without any negligence. The occupier shall be liable for action as per provisions of the Act in case of non compliance of any order/directions issued.

# **Special Additional Conditions:**

- i. The unit shall install the approved retrofit emission control device/equipment with at least 70% Particulate matter reduction efficiency on all DG sets with capacity of 125 KVA and above or otherwise the unit shall be shift to gas based generators within the time frame prescribed in the notification No. TNPCB/Labs/DD(L)02151/2019 dated 10.06.2020 issued by TNPCB.
- ii. The unit shall obtain No Objection Certificate (NOC) from the Tamil Nadu Bio Diversity Board /National Bio Diversity Authority if the unit is using any Biological resources or knowledge associated thereto as per the provisions of Biological Diversity Act 2002.

## **Additional Conditions:**

- 1. The unit shall comply with the conditions mentioned in the Environmental Clearance issued by MoEF & CC vide F.No.J-11011/172/2017-IA-II (I) dated 04.04.2019
- 2. The unit shall operate and maintain the air pollution control measures efficiently and continuously so as to adhere to the Ambient Air Quality / Emission standards prescribed by the Board.
- 3. The unit shall provide adequate air pollution control measures such as Electro Static Precipitator etc. to the additional boiler proposed to be installed for the expansion as reported.
- 4. The unit shall install flue gas desulphurization (FGD) system based on lime/ammonia dosing to capture Sulphur in the flue gases to meet the SO2 emissions standard of 100mg/Nm3.
- 5. The unit shall install Selective Catalytic Reduction (SCR) system or the Selective Non-Catalytic Reduction(SCNR) system or low NOx Burners with Over Fire Air(OFA) system to achieve NOx emission standard of 100 mg/Nm3.
- 6. The unit shall adhere to the Ambient Noise level standards prescribed by the Board.
- 7. The unit shall ensure that emission parameter satisfies the standards prescribed as per MoEF& CC's Notification issued from time to time.
- 8. The unit shall carry out emission survey for all the consented sources of emission through TNPCB lab and furnish ROA to Board.
- 9. The unit shall comply with the Notifications issued by CPCB from time to time for emission standards for thermal power plants.
- 10. The unit shall ensure that coal is stored in a closed shed and ensure that there is no fugitive emission due to wind action during loading and unloading operation.
- 11. The Unit shall operate and maintain the following measures for control of fugitive emission. Coal handling plant:
- a. To store the coal in a complete closed shed to reduce the emission due to wind.
- b. Totally enclosed coal conveyors to prevent wind erosion.
- c. Dust extraction systems at various dust emanating sources such as coal crusher, coal bunker, ash silo and all transfer points.
- d. Water sprinklers at various places in coal handling areas for wetting of coal.
- e. Coal movement inside the plant by covered coal conveyors only.
- f. Black topped roads inside the plant to prevent dust emission due to vehicular movement. Ash handling plant:
- a. Dust collectors at various places such as Electro Static Precipitators, Air pre heater, Economizers,
- b. The total dust collection system should be a closed one to prevent exposure of fly ash to atmosphere.
- c. The dry fly ash loading system for ash silos to load the closed vehicle for transportation to cement
- 12. The unit shall maintain the CO detection mechanism provided at the coal yard and connected with Care Air Centre of TNPCB, Guindy, Chennai and provide proper data at all times.
- 13. The unit shall ensure the connectivity of the CAAQMS for the parameters PM10, PM2.5, NOx,
- SO2 and CO with CAC of TNPCB, Guindy, Chennai and provide proper data at all times.

  14. The unit shall ensure the connectivity of the online continuous stack monitoring system for monitoring the parameters CO, PM, NOx, SO2 provided at the Boiler stack with CAC of TNPCB, Guindy, Chennai and provide proper data at all times.
- 15. The unit shall always comply with the EMP as reported in the EIA study report.
- 16. The unit shall transport the coal from Tuticorin port to the project site through covered trucks and ensure to take appropriate measures to control the emission during loading, unloading and transport.
- 17. The unit shall comply with the risk mitigation measures as suggested in the risk assessment study
- 18. The unit shall continue to develop and maintain the green belt with indigenous native tree species inaccordance with CPCB guidelines within the premises and furnish exact green belt area ear marked / developed in the unit premises and furnish photographs along with latitude and longitude co-ordinates.
- 19. The unit shall be liable to pay the consent fee and shall remit the difference in amount in case of any revision of consent fee by the Government.

For Member Secretary Tamil Nadu Pollution Control Board, Chennai

## **GENERAL CONDITIONS**

- 1. The occupier shall make an application along with the prescribed consent fee for grant of renewal of consent at least 60 days before the date of expiry of this Consent Order along with all the required particulars ensuring that there is no change in production quantity and emission.
- 2. This Consent is given by the Board in consideration of the particulars given in the application. Any change or alteration or deviation made in actual practice from the particulars furnished, in the application will also be ground for review/variation/revocation of the Consent Order under Section 21 of the Act.
- 3. The conditions imposed shall continue in force until revoked under Section 21 of the Act.
- 4. After the issue of this order, all the 'Consent to Operate' orders issued previously under Air (Prevention and Control of Pollution) Act, 1981 as amended stands defunct.
- 5. The occupier shall maintain an Inspection Register in the factory so that the inspecting officer shall record the details of the observations and instructions issued to the unit at the time of inspection for adherence.
- 6. The occupier shall provide and maintain an alternate power supply along with separate energy meter for the Air Pollution Control measures sufficient to ensure continuous operation of all pollution control equipments to ensure compliance.
- 7. The occupier shall provide all facilities to the Board officials for collection of samples in and around the factory at any time.
- 8. The applicant shall display the flow diagram of the sources of emission and pollution control systems provided at the site.
- 9. The liquid effluent arising out of the operation of the air pollution control equipment shall also be treated in a manner and to the satisfaction of standards prescribed by the Board in accordance with the provisions of Water (Prevention and Control of Pollution) Act, 1974 as amended.
- 10. The air pollution control equipments, location of inspection chambers and sampling port holes shall be made easily accessible at all time.
- 11. In case of any episodal discharge of emission, the industry shall take immediate action to bring down the emission within the limits prescribed by the Board.
- 12. If applicable, the occupier has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances.
- 13. The issuance of this consent does not authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any natural watercourse or in Government Poromboke lands.
- 14. The issuance of this Consent does not convey any property right in either real personal property or any exclusive privileges, nor does it authorize any injury to private property or Government property or any invasion of personal rights nor any infringement of Central, State laws or regulation.
- 15. The occupier shall forth with keep the Board informed of any accident of unforeseen act or event of any poisonous, noxious or polluting matter or emissions are being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
- 16. If due to any technological improvements or otherwise the Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any treatment system, either in whole or in part) the Board shall, after giving the applicant an opportunity of being heard, vary all or any of such conditions and thereupon the applicant shall be bound to comply with the conditions as so varied.
- 17. In case there is any change in the constitution of the management, the occupier of the new management shall file fresh application under Air (Prevention and Control of Pollution) Act, 1981, as amended in Form-I alongwith relevant documents of change of management immediately and get the necessary amendment with renewal of consent order.
- 18. In case there is any change in the name of the company alone, the occupier shall inform the same with relevant documents immediately and get the necessary amendments for the change of name from the Board.

	For Member Secre Tamil Nadu Pollution Co Chennai	etary, ntrol Board,

## Category of the Industry:

RED



CONSENT ORDER NO. 2207143608442 DATED: 15/07/2022.

#### PROCEEDINGS NO.T3/TNPCB/F.0145TRY/RL/TRY/W/2022 DATED: 15/07/2022

SUB: Tamil Nadu Pollution Control Board -CONSENT TO OPERATE FOR EXPANSION-I -M/s. M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)-(PHASE-I), S.F.No. 39/1,39/2, Part 46/1,296,302/1,302/2A,302/2B, 302/3, 302/4, 302/5, 302/6,302/7, 302/8A, 302/8B, 302/9. 302/10, 302,11, 302/12, 302/13, 302/14, 302/15 and 302/16. MONDIPATTY villageManappaarai Taluk and Thiruchirapalli District - Consent for the operation of the plant and discharge of sewage and/or trade effluent under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act 6 of 1974) - Issued-Reg.

REF: 1.PROCEEDINGS NO.T3/TNPCB/F.0145TRY/RL/TRY/W&A/2021 DATED: 11/08/2021

- 2.Unit's application No. 43608442, dated 24-02-2022 & 05-07-2022 3.IR.No : F.0145TRY/RL/JCEE-M/TRY/2022 dated 05/07/2022
- 4. Board's (Technical Sub Committee) Resolution Item No. 200-17, dated 11.07.2022.

CONSENT TO OPERATE FOR EXPANSION is hereby granted under Section 25 of the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988 (Central Act, 6 of 1974) (hereinafter referred to as "The Act") and the rules and orders made there under to

Chief General Manager (Board Plant)),

M/s . M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)- (PHASE-I) S.F No.39/1,39/2, Part 46/1,296,302/1,302/2A,302/2B, 302/3, 302/4, 302/5, 302/6,302/7, 302/8A, 302/8B, 302/9.

302/10, 302,11, 302/12, 302/13, 302/14, 302/15 and 302/16.

MONDIPATTY Village,

Manappaarai Taluk,

Thiruchirapalli District.

Authorising the occupier to make discharge of sewage and /or trade effluent.

This is subject to the provisions of the Act, the rules and the orders made there under and the terms and conditions incorporated under the Special and General conditions stipulated in the Consent Order issued earlier and subject to the special conditions annexed.

This CONSENT is valid for the period ending March 31, 2027

For Member Secretary Tamil Nadu Pollution Control Board, Chennai

To

Chief General Manager (Board Plant)),

M/s.M/S. TAMIL NADU NEWSPRINT AND PAPERS LTD UNIT-II (CAPTIVE CO GEN PLANT)- (PHASE-I),

M/S. Tamil Nadu Newsprint and Papers Limited, 67, Mount Road, Guindy, Chennai,

Pin: 600032

# Copy to:

- 1. The Commissioner, MANAPPARAI-Panchayat Union, Manappaarai Taluk, Thiruchirapalli District .
- $2.\ The\ District\ Environmental\ Engineer,\ Tamil\ Nadu\ Pollution\ Control\ Board,\ THIRUCHIRAPALLI.$
- ${\it 3. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.}\\$
- 4. File

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# SPECIAL CONDITIONS

1. This consent to operate for Expansion is valid for operating the facility for the manufacture of products (Col. 2) at the rate (Col. 3) mentioned below. Any change in the products and its quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Sl. No.	Description	Quantity	Unit	
Product Details				
1.	STEAM	180	TPH	
2.	Power Generation	50	MW	

2. This consent to operate for Expansion is valid for operating the facility with the below mentioned permitted outlets for the discharge of sewage/trade effluent. Any change in the outlets and the quantity has to be brought to the notice of the Board and fresh consent has to be obtained.

Outlet No.	<b>Description of Outlet</b>	Maximum daily discharge in KLD	Point of disposal			
Effluent Type : Sewage						
1.	Sewage	8.0	On land for gardening			
Effluent Type : Trade Effluent						
1.	Trade Effluent #1	600.0	Recycling to process			
2.	Trade Effluent #2	40.0	Dust suppression			

 The effluent discharge shall not contain constituents in excess of the tolerance Limits as laid down hereunder.

Sl.	Parameters	Unit	TOLERANCE LIMITS - OUTLETS -Nos			
No.			Sewage	Trade Effluent		
			1	1&2		
1.	рН		5.5 to 9	5.5 to 9		
2.	Temperature	оС	-	shall not exceed 5°C above the receiving water temperature		
3.	Particle size of Suspended solids	-	-	shall pass 850 micron IS sieve		
4.	Total Suspended Solids	mg/l	30	100		
5.	Total Dissolved solids (inorganic)	mg/l	-	2100		
6.	Oil & Grease	mg/l	-	10		
7.	Biochemical Oxygen Demand (3 days at 27oC)	mg/l	20	30		
8.	Chemical Oxygen Demand	mg/l	-	250		
9.	Chloride (as Cl)	mg/l	-	1000		
10.	Sulphates (as SO4)	mg/l	-	1000		
11.	Total Residual Chlorine	mg/l	-	1		
12.	Ammonical Nitrogen (as N)	mg/l	-	50		
13.	Total Kjeldahl Nitrogen (as N)	mg/l	-	100		
14.	Free Ammonia (as NH3)	mg/l	-	5		
15.	Arsenic (as As)	mg/l	-	0.2		
16.	Mercury (as Hg)	mg/l	-	0.01		
17.	Lead (as Pb)	mg/l	-	0.1		
18.	Cadmium(as Cd)	mg/l	-	2		
19.	Hexavalent Chromium (as Cr+6)	mg/l	-	0.1`		
20.	Total Chromium (as Cr)	mg/l	-	2		
21.	Copper (as Cu)	mg/l	-	3		
22.	Zinc (as Zn)	mg/l	-	1		
23.	Selenium (as Se)	mg/l	-	0.05		
24.	Nickel (as Ni)	mg/l	-	3		
25.	Boron (as B)	mg/l	-	2		
26.	Percent Sodium	%	-	-		
27.	Residual Sodium Carbonate	mg/l	-	-		
28.	Cyanide (as CN)	mg/l	-	0.2		
29.	Fluoride (as F)	mg/l	-	2		
30.	Dissolved Phosphates(as P)	mg/l	-	5		
31.	Sulphide (as S)	mg/l	-	2		
32.	Pesticides	mg/l	-			
33.	Phenolic Compounds (as C6H5OH)	mg/l	-	1		
34.	Radioactive materials a) Alpha emitters	micro curie/ml	-	10-7		
35.	Radioactive materials b). Beta emitters	micro curie/ml	-	10-6		

36.	Fecal Coliform	MPN/100ml	-		-		
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- 4. All units of the sewage and Trade effluent treatment plants shall be operated efficiently and continuously so as to achieve the standards prescribed in Sl No.3 above or to achieve the zero liquid discharge of effluent as applicable.
- 5. The occupier shall maintain the Electro Magnetic Flow Meters/water Meters installed at the inlet of the water supply connection for each of the purposes mentioned below for assessing the quantity of water used and ensuring that such meters are easily accessible for inspection and maintenance and for other purposes of the Act.
  - a. Industrial Cooling, Spraying in mine pits or boiler feed.
  - b. Domestic purpose.
  - c. Process.
- 6. The occupier shall maintain the Electro Magnetic Flow Meters with computer recording arrangement for measuring the quantity of effluent generated and treated for the monitoring purposes of the Act.
- 7. Log book for each of the unit operations of ETP have to be maintained to reflect the working condition of ETP along with the readings of the Electro Magnetic Flow Meters installed to assess effluent quantity and the same shall be furnished for verification of the Board officials during inspection.
- 8. The occupier shall at his own cost get the samples of effluent/surface water/ground water collected in and around the unit by Board officials and analyzed by the TNPC Board Laboratory periodically.
- 9. Any upset condition in any of the plants of the factory which is, likely to result in increased effluent discharge and result in violation of the standards mentioned in Sl. No.3 above shall be reported to the Member Secretary / Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
- 10. The occupier shall always comply and carryout the order/directions issued by the Board in this Consent Order and from time to time without any negligence. The occupier shall be liable for action as per provisions of the Act in case of non compliance of any order/directions issued.
- 11. The occupier shall develop adequate width of green belt at the rate of 400 numbers of trees per Hectare.
- 12. The occupier shall provide and maintain rain water harvesting facilities.
- 13. The occupier shall ensure that there shall not be any discharge of effluent either treated or untreated into storm water drain at any point of time.
- 14. In the case of zero liquid discharge of effluent units, the occupier shall adhere the following conditions as laid under.
  - i). The occupier shall ensure zero liquid discharge of effluent, thereby no discharge of untreated / treated effluent on land or into any water bodies either inside or outside the premises at any point of time.
  - ii) The occupier shall operate and maintain the Zero liquid discharge treatment components comprising of Primary, Secondary and tertiary treatment systems at all times and ensure that the RO permeate/Evaporator condensate shall be recycled in the process and the final RO reject shall be disposed off with the reject management system ensuring zero liquid discharge of effluents in the premises.
  - iii) The occupier shall operate and maintain the reject management system effectively and recover the salt from the system which shall be reused in the process if reusable or shall be disposed off as ETP sludge.
  - iv) In case of failure to achieve zero discharge of effluents for any reason, the occupier shall stop its production and operations forthwith and shall be reported to the Member Secretary/Joint Chief Environmental Engineer-Monitoring and the concerned District/Assistant Environmental Engineer of the Board by e-mail immediately and subsequently by Post with full details of such upset condition.
  - v) The occupier shall restart the production only after ascertaining that the Zero discharge treatment system can perform effectively for achieving zero discharge of effluents.

## **Special Additional Conditions:**

The unit shall obtain No Objection Certificate (NOC) from the Tamil Nadu Bio Diversity Board /National Bio Diversity Authority if the unit is using any Biological resources or knowledge associated thereto as per the provisions of Biological Diversity Act 2002.

# **Additional Conditions:**

- 1. The unit shall comply with the conditions mentioned in the Environmental Clearance issued by MoEF & CC vide F.No. J-11011/172/2017-IA-II (I) dated 04.04.2019.
- 2. The unit shall not exceed the consented production capacity and the generation of sewage and trade effluent.
- 3. The unit shall operate and maintain the STP for the treatment of sewage efficiently and continuously and the treated sewage shall be utilized on unit's own land for gardening after satisfying the standards prescribed by the Board.
- 4. The Unit shall ensure that the entire quantity of trade effluent is recycled in the process / used for dust suppression after satisfying the disposal standards prescribed by the Board.
- 5. The unit shall regularly analyze the treated sewage & treated trade effluent and furnish the ROA of the same to the Board.
- 6. The Unit shall operate and maintain the EMFM with computer recorder arrangements in the inlet and the outlet of STP.
- 7. The Unit shall maintain the EMFM with computer recorder arrangements provided for the generation, treatment and disposal of the trade effluent from each source and maintain the data at all
- 8. The unit shall provide flow meters at the disposal point of trade effluent for recycling and web camera with night vision capability to monitor recycling of trade effluent and shall connect the same to WQW,TNPCB and CPCB online servers.
- 9. The Unit shall comply with the conditions stipulated in the Hazardous Waste Authorization obtained under Hazardous and Other Waste (M&TM) Rules, 2016.
- 10. The Unit shall dispose the non-hazardous solid wastes then and there without accumulating the same inside the premises.
- 11. The Unit shall maintain log book with proper entries for receipt of raw materials, chemicals used for process, quantity of water usage, quantity of effluent from all sources separately, solid waste generation / storage / disposal and quantity of products manufactured.

  12. The Unit shall maintain good housekeeping both within the factory and in the premises.
- 13. The Unit shall provide water meters at the inlet of the water supply connection for each of the purposes separately for assessing the quantity of water used and ensuring that such meters are easily accessible for inspection and maintenance and for other purposes of the Act.
- 14. The Unit shall not use 'use and throwaway plastics' such as plastic sheets used for food wrapping, spreading on dining table etc., plastic plates, plastic coated tea cups, plastic tumbler, water pouches and packets, plastic straw, plastic carry bag and plastic flags irrespective of thickness, within the Unit premises. Instead it shall encourage use of eco friendly alternative such as banana leaf, areca nut palm plate, stainless steel, glass, porcelain plates / cups, cloth bag, Jute bag etc.
- 15. The unit shall be liable to pay the consent fee and shall remit the difference in amount in case of any revision of consent fee by the Government.
- 16. The unit shall comply with the Notifications issued by CPCB from time to time for water consumption, effluent standards and Coal / Ash handling.

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai

### **GENERAL CONDITIONS**

- 1. The occupier shall make an application along with the prescribed consent fee for grant of renewal of consent at least 60 days before the date of expiry of this Consent Order along with all the required particulars ensuring that there is no change in Production quantity and change in sewage/Trade effluent.
- 2. This Consent is issued by the Board in consideration of the particulars given in the application. Any change or alteration or deviation made in actual practice from the particulars furnished in the application will also be ground for review/variation/revocation of the Consent Order under Section 27 of the Act and to make such variation as deemed fit for the purpose of the Act.
- 3. The consent conditions imposed in this order shall continue in force until revoked under Section 27(2) of the Act.
- 4. After the issue of this order, all the 'Consent to Operate' orders issued previously under Water (Prevention and Control of Pollution) Act, 1974 as amended stands defunct.
- 5. The occupier shall maintain an Inspection Register in the factory so that the inspecting officer shall record the details of the observations and instructions issued to the unit at the time of inspection for adherence.
- 6. The occupier shall provide and maintain an alternate power supply along with separate energy meter for the Effluent Treatment Plant sufficient to ensure continuous operation of all pollution control equipments to maintain compliance.
- 7. The occupier shall provide all facilities to the Board officials for inspection and collection of samples in and around the factory at any time.
- 8. The occupier shall display the flow diagram of the sources of effluent generation and pollution control systems provided at the ETP site.
- 9. The solid waste such as sweepings, wastage, package, empty containers, residues, sludge including that from air pollution control equipments collected within the premises of the industrial plant shall be collected in an earmarked area and shall be disposed off properly.
- 10. The occupier shall collect, treat the solid wastes like food waste, green waste generated from the canteen and convert into organic compost.
- 11. The occupier shall segregate the Hazardous waste from other solid wastes and comply in accordance with Hazardous Wastes (Management, Handling and Transboundary Movement) Rules, 2008.
- 12. The occupier shall maintain good house-keeping within the factory premises.
- 13. All pipes, valves, sewers and drains shall be leak proof. Floor washings shall be admitted into the trade effluent collection system only and shall not be allowed to find their way in storm drains or open areas.
- 14. The occupier shall ensure that there shall not be any diversion or by-pass of trade effluent on land or into any water sources.
- 15. The occupier shall ensure that solar Evaporation pans shall be constructed in such a way that the bottom of the solar pan is at least 1 m above the Ground level (if applicable).
- 16. The occupier shall furnish the following returns in the prescribed formats to the concerned District office regularly.
  - a) Monthly water consumption returns of each of the purposes with water meter readings in Form-I on or before 5th of every month.
  - b) Yearly return on Hazardous wastes generated and accumulated for the period from 1st April to 31st March in Form–4 before the end of the subsequent 30th June of every year (if applicable). c) Yearly Environmental Statement for the period from 1st April to 31st March in Form –V before the
  - c) Yearly Environmental Statement for the period from 1st April to 31st March in Form –V before the end of the subsequent 30th September of every year(if applicable).
- 17. If applicable, the occupier has to comply with the provisions of Public Liability Insurance Act, 1991 to provide immediate relief in the event of any hazard to human beings, other living creatures/plants and properties while handling and storage of hazardous substances.
- 18. The issuance of this consent does not authorize or approve the construction of any physical structures or facilities or the undertaking of any work in any natural watercourse or in Government Poromboke lands.
- 19. The issuance of this Consent does not convey any property right in either real personal property or any exclusive privileges, nor does it authorize any injury to private property or Government property or any invasion of personal rights nor any infringement of Central, State laws or regulation.

- 20. The occupier shall forth with keep the Board informed of any accident of unforeseen act or event of any poisonous, noxious or polluting matter or emissions are being discharged into stream or well or air as a result of such discharge, water or air is being polluted.
- 21. If due to any technological improvements or otherwise the Board is of opinion that all or any of the conditions referred to above requires variation (including the change of any treatment system, either in whole or in part) the Board shall, after giving the applicant an opportunity of being heard, vary all or any of such conditions and thereupon the applicant shall be bound to comply with the conditions as so varied.
- 22. In case there is any change in the constitution of the management, the occupier of the new management shall file fresh application under Water (Prevention and Control of Pollution) Act, 1974, as amended in Form-II alongwith relevant documents of change of management immediately and get the necessary amendment with renewal of consent order.
- 23. In case there is any change in the name of the company alone, the occupier shall inform the same with relevant documents immediately and get the necessary amendments for the change of name from the Board.
- 24. The occupier shall display this consent order granted to him in a prominent place for perusal of the inspecting Officers of this Board.

For Member Secretary, Tamil Nadu Pollution Control Board, Chennai அனுப்புநர்::

சு.சிவராசு, இ.ஆ.ப. மாவட்ட ஆட்சித் தலைவர், திருச்சிராப்பள்ளி. பெறுநர்::

கண்காணிப்புப் பொறியாளர், பொதுப்பணித்துறை (நீஆது), நடுக்காவிரி வடிநில வட்டம், திருச்சிராப்பள்ளி-20

ந.க.அ1 /15426/ 2020

நாள்: 26.09.2020

அய்யா,

பொருள்::

திருச்சிராப்பள்ளி மாவட்டம் - தமிழ்நாடு செய்திதாள் காகித நிறுவனம் - காவிரி ஆற்றிலிருந்து தனது தொழிற்சாலை பயன்பாட்டிற்காக தண்ணீர் எடுத்தல் - ஒப்பந்தகால நீட்டிப்பு 31.10.2020 முதல் 31.10.2025 வரை உள்ள காலத்திற்கு அனுமதி வழங்க பரிந்துரை செய்தல் - தொடர்பாக

- பார்வை 1. திருச்சிராப்பள்ளி கண்காணிப்பு பொறியாளர், (பொ.ப.து) (நீ.ஆ.அ) நடுகாவிரி வடிநிலவட்டம், கடித எண்: 62ஆ-வபி-வ7-கோ.TNPL/2020 நாள்:18.07.2020.
  - 2. அரசாணை (நிலை) எண்.18, பொதுப்பணி (எண்.2) துறை, நாள்: 22.01.2015.
  - 3. அரசாணை (நிலை) எண்.227, பொதுப்பணி (W2) துறை நாள்:20.11.2017.
  - ஸ்ரீரங்கம் உதவி ஆட்சியர் அவர்களின் கடித எண்:A2/3378/2020 நாள்:15.09.2020.

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பார்வையில் காணும் கடிதங்களின் மீது தங்களது கவனத்தை ஈர்க்க விழைகிறேன்.

திருச்சிராப்பள்ளி மாவட்டம், மணப்பாறை வட்டம், மொண்டிப்பட்டி கிராமத்தில் இயங்கி வரும் தமிழ்நாடு செய்தித்தாள் மற்றும் காகித நிறுவனம் தொழிற்சாலை பயன்பாட்டிற்காக நாளொன்றுக்கு 23.10MLD தண்ணீர் காவிரி ஆற்றிலிந்து 01.11.2015 முதல் 30.10.2020வரை எடுத்துக்கொள்ள அனுமதி வழங்கி பார்வை 2-ல் காணும் அரசாணையின் படி ஆணை வெளியிடப்பட்டுள்ளது. மேற்படி தண்ணீர் எடுப்பதற்கான ஒப்பந்த அனுமதியினை 31.10.2020 முதல் 30.10.2025 வரை நீட்டிக்க திருச்சிராப்பள்ளி நீர் ஆதாரத்துறை, நடுக்காவிரி வடிநில வட்டம் கண்காணிப்பு பொறியாளர் பரிந்துரை செய்ததை தொடர்து பார்வை 4-ல் காணும் ஸ்ரீரங்கம் உதவி ஆட்சியரின் அறிக்கை பெறப்பட்டு பரிசீலனை செய்யப்பட்டது.

திருச்சிராப்பள்ளி மாவட்டம், மணப்பாறை வட்டம், மொண்டிப்பட்டியில் அமைந்துள்ள தமிழ்நாடு செய்தித்தாள் மற்றும் காகித நிறுவனம் தொழிற்சாலை 23.10MLD தண்ணிர் காவிரி ஆற்றிலிருந்து பயன்பாட்டிற்காக நாளொன்றுக்கு 01.11.2015 முதல் 30.10.2020வரை எடுத்துக்கொள்ள அரசாணை (நிலை) எண்.18, பொதுப்பணி(எண்.2) துறை, நாள்: 22.01.2015-ன்படி அனுமதி வழங்கப்பட்டுள்ளது rplegi CLOTTLAT எடுக்க esconi confii ஆலைக்கு காகிக என்றும், மேற்படி அமைக்கப்பட்டுள்ள இடம், மின் இயந்திரம் அமைக்கப்பட்டுள்ள அறை மற்றும் மின் நிறுவனத்தினரால் புதிதாக இடம் அமைக்கபட்டுள்ள மாற்றி செய்யப்பட்டுள்ள பெருகமணி கிராமம் அயன் புன்செய் புல எண் 141/7-ல் உட்பிரிவு எண் 141/7A, 7B-ல் அமைக்கப்பட்டுள்ளதாகவும், தண்ணிர் எடுக்கும் இடமான ஸ்ரீரங்கம் வட்டம், பெருகமணி கிராமத்தில் காவிரி ஆற்றில் அமைக்கப்பட்டுள்ள நீர் உறிஞ்சி கிணறு முதல் மணப்பாறை வட்டம், மொண்டிப்பட்டி அமைந்துள்ள காகித நிறுவனத்தின் வளாகத்தில் உள்ள நீர் சேகரிக்கும் குளம் குழாய்கள் அமைக்கபட்டுள்ளதாகவும், நீளமுள்ள 31.10கி.மீ ஆற்றில்லிந்து வரப்பெறும் நீரானது நீர் தேக்கத்தில் சேகரிக்கப்பட்டு குழாய்கள் மூலம் அருகிலுள்ள சுத்திகரிப்பு நிலையத்தில் சுத்திகரிக்கபட்டு காகித ஆலைக்கு அனுப்பப்படுகிறது என்றும், ஆலைக்கு எதிராக பொதுமக்களின் குற்றச்சாட்டுகள் மேற்படி நிறுவனமானது நாளொன்றுக்கு 23.10 MLD ஏதும் இல்லை என்றும், அளவு காவிரி ஆற்றிலிருந்து தண்ணீர் எடுப்பதற்காக முன்பணத்தொகை(Advance Payment) (2020-2021ஆம் ஆண்டிற்கு) ரூ.1,26,47,250/- செலுத்தப்பட்டுள்ளது தெரியவருகிறது.

- மேலும் தண்ணீர் மற்றும் காற்று சட்டங்களின் கீழ், 31.03.2020 வரை செல்லத்தக்க தமிழ்நாடு மாசுக்கட்டுபாட்டு வாரியம் வழங்கிய இசைவு ஆணையின் நகலை தமிழ்நாடு செய்தித்தாள் மற்றும் காகித நிறுவனம் சமர்ப்பித்துள்ளது.
- 2. மேற்படி நிறுவனம் நாளொன்றிற்கு 23.10MLD தண்ணீர் எடுத்துவருகிறார்கள். மேலும் காகிதம் தயாரிக்க பயன்படுத்தப்பட்ட கழிவுநீர் நவீன முறையில் சுத்திகரிப்பு செய்யப்பட்டு இறுதியாக கிடைக்கப்பெறும் நீர் வண்டல் தேங்கும் அமைப்பில் சேகரிக்கப்பட்டு கிடைக்கும் நீரும்,வண்டலும் அருகாமையில் உள்ள விளைநிலங்களுக்கு இலவசமாக வழங்கப்படுகிறது.
- தமிழ்நாடு செய்தித்தாள் மற்றும் காகித நிறுவனம் காவிரி ஆற்றிலிருந்து தண்ணீர் எடுப்பதற்கு எதிராக நாளது தேதிவரை எந்தவித புகாரும் வரப்பெறவில்லை. மேலும் இந்நிறுவனமானது அரசாணை எண்.227

- நாள்: 20.11.2017 ல் குறிப்பிடப்பட்டுள்ள சாதாரண மற்றும் சிறப்புவிதிகளை மீறவில்லை.
- 4. தமிழ்நாடு செய்தித்தாள் மற்றும் காகித நிறுவனத்தால் ஒப்பந்தம் புதுப்பித்தலை எதிர்நோக்கி காவிரி ஆற்றிலிருந்து தண்ணீர் எடுப்பதற்கு முன்பணத்தொகையாக 2020-2021ஆம் ஆண்டிற்கு ரூ.1,26,47,250/-செலுத்தப்பட்டுள்ளது.
- 5. இந்நிறுவனமானது தண்ணீர் கிடைக்கும் இடத்திலும், சேரும் இடத்திலும் உரிய முறையில் எண்ணியில் மீட்டர் (Digital Meter) அமைக்கப்பட்டு முறையாக கணக்கீடு செய்யப்பட்டு வருகிறது. மேலும் பழுது ஏற்பட்டால் உடனடியாக மாற்ற மற்றொரு மீட்டர் இருப்பில் உள்ளது.

எனவே, தமிழ்நாடு செய்தித்தாள் மற்றும் காகித நிறுவனம் காவிரி ஆற்றிலிருந்து தொழிற்சாலை உபயோகத்திற்காக நாள் ஒன்றுக்கு 23.10MLD தண்ணீர் எடுத்துக்கொள்ள 31.10.2020 முதல் 31.10.2025 வரை ஐந்து வருடங்களுக்கு ஒப்பந்த காலத்தினை நீட்டித்து நாள்:20.11.2017-ல் (நிலை) எனர்.227, பொதுப்பணி (W2) துறை அரசாணை உட்பட்டு அனுமதி வழங்கலாம் என்பதை தெரிவிக்கபட்டுள்ள நிபந்தனைகளுக்கு தெரிவித்துக்கொள்கிறேன்.

> ஒம்/-சு.சிவராசு, மாவட்ட ஆட்சித் தலைவர், திருச்சிராப்பள்ளி.

/உத்தரவுப்படி/

மாவட்ட ஆட்சித்தலைவருக்காக, திருச்சிராப்பள்ளி.

28/9/2020





# AUTHORISATION No. 17HFC6656354 dated 21/06/2017 Proceeding No. T12/TNPCB/F.0142TRY/HWA/RL/TRY/2017 dated 21/06/2017

Sub: Tamil Nadu Pollution Control Board – Hazardous Waste Authorization-Fresh- M/s. TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT), S.F.No. MONDIPATTI VILLAGE: 1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1 to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A&2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &22,476 to 478, 479/1 to 3, 480/1& 2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A& 6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D, 3, 4A to 4C& 5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 525/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 52/1/&2, 528/1A, 1B&2 2A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE: 1/1 to 5, 6A, 6B &7, 2/1A, 1B&2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to 1C, 7/2, 3, 4A, 4B, 5A, 5B, 6A, 5B/1A to 1C, 1/2 & 3, 4A, 4B, 5A, 5B/1B, 2A, 5B/1B, 2A

Ref: 1. Unit's application No. 6656354, dated 06-01-2017 / 13-05-2017. 2. HWA-IR.No.0142TRY/HWA/RL/DEE/TRY/2017 dated 30/05/2017.

## FORM 2

[See rule 6 (2)]

FORM FOR GRANT OR RENEWAL OF AUTHORISATION TO THE OCCUPIERS, RECYCLERS, REPROCESSORS, REUSERS, USER AND OPERATORS OF DISPOSAL FACILITIES

Number of authorization: 17HFC6656354 and dated: 21/06/2017

அகம் தூய்மை வாய்மைக்கு ! புறம் தூய்மை வாழ்வுக்கு !



 CHIEF GENERAL MANAGER (BOARD PLANT) of M/s. TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT) is hereby granted an Authorisation based on the enclosed signed Inspection report for Generation, Reception, Collection, Storage, Transportation, Utilization and Disposal

of hazardous or other wastes or both on the premises situated at S.F.No. MONDIPATTI VILLAGE:1/1,2,3A&3B, 2/1&2,3/1 to 6, 4/1to 3, 5/1 to 3, 6/1 to 4, 7/1 to 7, 8/1 to 3, 9/2, 10, 11/1,2A,2B,3 to 5, 12/1 to 5, 6A &6B, 13/1 to 4, 14/1&2, 15/1,2A,2B,2C Part,2D,3, 4A Part, 4B Part & 4D Part, 16/1,2A Part,2G, 2H, 2I, 2J, 5A, 6A, 6D, 6E Part, 6F&6G, 17/1,2 Part,3 Part&4 Part, 18, 22/1,2&3 Part, 31/1 to 5, 6A &6B, 40/1&2, 41, 42, 43/1to10, 44/1 to 6, 45/1to4, 46/1 part, 108, 109, 110, 297, 298/1 to 10, 299/1,2,3A,3B, 4 & 5, 300/1 to 5, 301/1 to 10, 303/3, 304 K.PERIYAPTTI (NORTH)VILLAGE: 2/1A, 1C to F, 1S to Z, 1A1A, 1A1B, 1AF, 1AG &2, 3/1, 2A, 2B, 3A1, 3A2, 3B1, 3B2, 3C1, 3C2, 3D1 &3D2,7/1A, 1B, 1C1, 1D1, 1E to G, 2A & 3A, 13/1, 2A to 7A, 7B & 7C to 7H, 14/1A to 1E, 2A &2B, 19/1A to 1C, 2A, 2B & 3A to 3D, 20/1 to 3, 21/1 to 3, 22/2 to 14, 23/1,47/1A &2, 48/1 to 5, 405/1A1 to 1A5, 1B &2, 406/1A, 1B, 2A &2B, 407/1 to 7, 408/1, 2, 3A & 3B, 409/1-A, 410/1 to 4, 415/2, 462/1A to 1C &2A to 2E, 464/1A, 1B, 2A&2B, 465/1A to 1E, 2A &2B, 466/1&2, 467, 468/1 to 3, 470, 471, 472/1 to 3, 473/1,2, 474/1 to 3, 475/1A to 1C &2,476 to 478, 479/1 to 3, 480/1&2, 481/1 to 34, 482/1 to 4, 5A, 5B, 6A& 6B, 484/2A2, &2B, 506/1 to 6, 507, 508/1A to 1D, 508/2A&2B, 509/1A, 1B, 2A&2B, 518/1, 2A to 2D, 3, 4A to 4C&5, 520/2, 521/1 &2A to 2D, 522/1, 523/1A to 1D, 2 to 4, 5A to 5D, 6 &7, 524/1, 2A, 2B, 3&4, 25/1A to 1E, 2 & 3A to 3E, 526/1 to 4, 527/1&2, 528/1A, 1B&2 A1, 529/1A, 4, 5, 6A & 6B, 530/1 to 6 CHETTICHATRAM VILLAGE:1/1 to 5, 6A, 6B &7, 2/1A, 1B&2 to 13, 3/2, 3A, 4A, 4B &4C1, 4/3A, 2, 9A, 10 to 18, 23A&24, 5/2A to 2K, 6/1A to 1C, 7/2, 3, 4A, 4B, 5A, 5B &6, 59/1-A&2 to 4, 60, 61/1&2,70/1&2, MONDIPATTY Village, MANAPPAARA1 Taluk, Thiruchirapalli District.



SI No	Schedule / Name of the Processes	Name of Hazardous Waste (with category No)	Quantity	Activities for which Authorization is issued
I	Schedule I /5. Industrial operations using mineral or synthetic oil as lubricant in hydraulic systems or other applications	ons using mineral or c oil as lubricant in ic systems or other		Generation, Collection, Storage, Transportation and Disposal to Authorized Recyclers for Recovery and Reuse
2	Schedule I/35. Purification and treatment of exhaust air/gases, water and waste water from the processes in this schedule and common industrial effluent treatment plants (CETP's)	35.3-Chemical sludge from waste water treatment	12000 T/Annum	Generation, Collection, Storage, Transportation and Disposal to cardboard manufacturers to be used as raw material.
3	Schedule II /Class A: Based on Leachable Concentration Limits [TCLP/STLC]	A5-Lead concentration limit equal to (or) more than 5 mg/l	15 T/Annum	Generation, Collection, Storage, Transportation and Disposal to Authorized Recyclers for Recovery and Reuse
4	Schedule II /Class A: Based on Leachable Concentration Limits [TCLP/STLC]	A66-Copper concentration limit equal to (or) more than 25 mg/l	15 T/Annum	Generation, Collection, Storage, Transportation and Disposal to Authorized Recyclers for Recovery and Reuse
510	Schedule III /Part-D- B3- Wastes containing principally organic constituents, which may contain metals and inorganic materials	B3020-Paper, paperboard and paper product wastes, provided they are not mixed with hazardous wastes-Waste and scrap of paper or paperboard of unbleached paper or paperboard or of corrugated paper or paperboard	6075 T/Annum	Reception, Transportation, Storage and Utilization (captive consumption).
6	Schedule III /Part-D- B3- Wastes containing principally organic constituents, which may contain metals and inorganic materials	B3020-Paper, paperboard and paper product wastes, provided they are not mixed with hazardous wastes-Waste and scrap of paper or paperboard of other paper or paperboard, made mainly of bleached chemical pulp, not coloured in the mass	12150 T/Annum	Reception, Transportation, Storage and Utilization (captive consumption).
7	Schedule III /Part-D- B3- Wastes containing principally organic constituents, which may contain metals and inorganic materials	B3020-Paper, paperboard and paper product wastes, provided they are not mixed with hazardous wastes-Waste and scrap of paper or paperboard of paper or paperboard made mainly of mechanical pulp	16200 T/Annum	Reception, Transportation, Storage and Utilization (captive consumption).

# **POLLUTION PREVENTION PAYS**

அகம் தூய்மை வாய்மைக்கு! புறம் தூய்மை வாழ்வுக்கு!



Schedule III /Part-D- B3- Wastes containing principally organic constituents, which may contain metals and inorganic materials	B3020-Paper, paperboard and paper product wastes, provided they are not mixed with hazardous wastes-Waste and scrap of paper or paperboard of other, including but not limited to (1) laminated paperboard, (2) Unsorted scrap.	6075 T/Annum	Reception, Transportation, Storage and Utilization (captive consumption).
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This authorization shall be valid for a period upto 20/06/2022.

The Authorization is issued subject to the following general and special conditions annexed.

R. KANNAN

Digitally signed by R. KANNAN Date: 2017.06.22 14:46:33 +05'30'

Member Secretary Tamil Nadu Pollution Control Board Chennai

### A. GENERAL CONDITIONS OF AUTHORIZATION

- 1. The authorised person shall comply with the provisions of the Environment (Protection) Act, 1986 and the rules made there under.
- 2. The authorization or its renewal shall be produced for inspection at the request of an officer authorized by Tamil Nadu Pollution Control Board.
- 3. The person authorized shall not rent, lend, sell, transfer or otherwise transport the hazardous and other wastes except what is permitted through this Authorisation.
- 4. Any unauthorized change in personnel, equipment or working conditions as mentioned in the application by the person authorized shall constitute a breach of his authorization.
- 5. The person authorised shall implement Emergency Response procedure (ERP) for which this authorisation is being granted considering all site specific possible scenarios such as spillages, leakages, fire ,etc and their possible impacts and also carry out mock drill in this regard at regular interval of time.
- 6. The person authorised shall comply with the provisions outlined in the CPCB guidelines on "Implementing Liabilities for Environmental damages due to Handling and Disposal of Hazardous Wastes and Penalty".
- 7. It is the duty of the authorized person to take prior permission of Tamil Nadu Pollution Control Board to close down the facility.
- 8. The imported Hazardous and other wastes shall be fully insured for transit as well as the accidental occurrences and its clean-up operation.
- 9 The record of consumption and fate of the imported hazardous and other wastes shall be maintained.
- 10. The Hazardous and other wastes which gets generated during recycling or reuse or recovery or preprocessing or utilisation of imported hazardous or other wastes shall be treated and disposed of as per specific conditions of Authorisation.
- 11 The importer or Exporter shall bear the cost of import or export or mitigation of damages if any.



- 12 An application for the renewal of an authorization shall be made as laid down under these Rules.
- Any other conditions for compliance as per the Guidelines issued by the MoEF and CC or CPCB from time to time.
- Annual returns shall be filed by June 30th for the period ending 31st March of the previous financial year.

# B. SPECIFIC CONDITIONS - HW Generator

- 1. The occupier/generator shall be responsible for safe and environmentally sound management of hazardous and other wastes.
- 2. The occupier shall follow the following steps for the management of hazardous and other wastes. (a) prevention (b) minimization (c) reuse (d) recycling (e) recovery, utilisation including co-processing and (f) safe disposal
- 3. The occupier shall take all the steps while managing hazardous and other wastes (a) To contain contaminants and prevent accidents and limit their consequences on human beings and the environment; and (b) To provide persons working in the site with appropriate training, equipment and the information necessary to ensure their safety.
- 4. The occupier shall store the hazardous and other wastes for a period not exceeding ninety days and shall maintain a record of sale, transfer, storage, recycling, recovery, pre-processing, co-processing and utilisation of such wastes and make these records available for inspection:
- 5. The hazardous and other wastes shall be stored temporally in an isolated area earmarked for the purpose within the occupier's premises (it shall not be accessible to rain water) till scientific disposal. The storage area shall be fenced properly and a sign of danger shall be placed at the storage site.
- 6. The containers holding the hazardous and other wastes shall be kept in good condition and made of materials which can withstand the physical and environmental conditions during storage and transportation. Only properly cleaned containers shall be used for storage of hazardous and other wastes.
- 7. The occupier handling hazardous or other wastes shall maintain records of such operations of generation, handling, storage and disposal as per Form 3.
- 8. The hazardous and other wastes generated in the establishment of the occupier shall be sent or sold to an authorised actual user or shall be disposed of in an authorised disposal facility.
- 9. The occupier handling hazardous or other wastes shall ensure that the hazardous and other wastes are packaged in a manner suitable for safe handling, storage and transport as per the guidelines issued by the Central Pollution Control Board from time to time
- 10. The labelling of package of hazardous or other wastes shall be done as per Form 8. The label shall be of non-washable material, weather proof and easily visible.
- 11. The hazardous and other wastes shall be transported from the occupier's establishment to an authorised actual user or to an authorised disposal facility in accordance with the provisions of these rules.
- 12. The transport of the hazardous and other wastes shall be in accordance with the provisions of these rules and the rules made by the Central Government under the Motor Vehicles Act, 1988 and the guidelines issued by the Central Pollution Control Board from time to time in this regard.

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- 13. The occupier shall provide the transporter with the relevant information in Form 9, regarding the hazardous nature of the wastes and measures to be taken in case of an emergency and shall label the hazardous and other wastes containers as per Form 8
- 14. The authorisation for transport shall be obtained either by the sender or the receiver on whose behalf the transport is being arranged.
- 15. The transporter/sender of the hazardous and other wastes shall prepare and maintain manifest in Form 10.
- 16. The occupier or the operator or the transporter shall immediately intimate TNPCB through telephone, e-mail about the accident and subsequently send a report in Form 11, where an accident occurs at the facility of the occupier handling hazardous or other wastes and operator of the disposal facility or during transportation
- 17. The occupier who intends to get its hazardous and other wastes treated and disposed of by the operator of a treatment, storage and disposal facility shall give to the operator of that facility, such specific information as may be needed for safe storage and disposal.
- 18. The occupier shall be liable for all damages caused to the environment due to improper handling and management of the hazardous and other wastes.
- 19. The occupier handling hazardous and other wastes shall submit annual returns containing the details specified in Form 4 to TNPCB on or before the 30th day of June of every year for the preceding period April to March.
- 20. Any increase in quantity of handling of hazardous and other wastes, any change in category of hazardous and other wastes and any change in method of handling operations shall be brought to the notice of the TNPCB and fresh authorization shall be obtained.

# D. SPECIFIC CONDITIONS - Actual Users (Recyclers/Pre-processors/Co-processors)

- 1. The actual user shall be responsible for safe and environmentally sound management of hazardous and other wastes
- The actual user shall procure and process the hazardous and other wastes for reuse, recycle, preprocess, utlise including co-processing for beneficial purposes only.
- 3. The utilisation of hazardous and other wastes as a resource or after pre-processing either for co-processing or for any other use, including within the premises of the generator (if it is not part of process), shall be carried out only after obtaining authorisation from TNPCB in respect of waste on the basis of standard operating procedures or guidelines provided by the Central Pollution Control Board.
- 4. The authorised actual user of hazardous and other wastes shall maintain records of hazardous and other wastes purchased in a passbook issued by the State Pollution Control Board along with the authorisation
- Handing over of the hazardous and other wastes to the authorised actual user shall be only after making the entry into the passbook of the actual user
- The actual user handling hazardous and other wastes shall file an annual return in Form 4 to TNPCB on or before the 30th day of June following the financial year to which that return relates.
- 7. The actual user or the transporter shall immediately intimate TNPCB through telephone, e-mail about the accident and subsequently send a report in Form 11, where an accident occurs at the facility of the occupier handling hazardous or other wastes and operator of the disposal facility or during transportation



- 8. The actual user, importer or exporter shall be liable for all damages caused to the environment or third party due to improper handling and management of the hazardous and other wastes.
- 9. The actual user shall not be permitted to import hazardous and other wastes from any country to India for disposal.
- 10. The actual user shall not be permitted to import hazardous and other wastes specified in Schedule VI of the rules.
- 11. The actual user shall import hazardous and other wastes from any country only for recycling, recovery, reuse and utilisation including co-processing.
- 12. The actual user shall import the hazardous waste as in Part A of Schedule III after obtaining prior informed consent of the exporting country and the permission of the Ministry of Environment, Forest and Climate Change
- 13. The actual user shall maintain records of the hazardous and other waste imported by him in Form 3 and the record so maintained shall be made available for inspection.

# ADDITIONAL SPECIFIC CONDITIONS

- 1. The unit shall dispose the used or Spent Oil ,Lead and copper bearing residues to the units baving valid authorization of the Board and registration certificate as recyclers and necessary endorsement shall be made in respect of the quantity transacted in the original letter of registration issued to the recycling unit lifting the Hazardous waste.
- 2. The Hazardous wastes shall be stored in a compatible container on an impervious platform in closed shed which shall be provided with requisite fire protection system, personal protective equipment and safety system.
- 3. No hazardous waste, municipal solid waste or bio-medical waste or any other type of contaminates shall be allowed to be imported along with the paper wastes.
- 4. The unit submit the annual return for the import of waste paper in Form 4 to SPCB on or before 30th day of June following the financial year
- 5. The unit shall maintain the records of the Hazardous and Other Wastes imported in Form 3 and the record shall be made available for inspection as per hazardous and other Waste (HTM) Rules 2016.
- 6. The unit shall import required quantity of waste paper to manufacture the consented quantity of product.
- 7. The person authorized shall comply with all the conditions stipulated in the authorization and other conditions of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- 8. The unit shall maintain Form 3 and submit Form 4 prescribed under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for the Hazardous wastes.
- 9. The Hazardous wastes shall be disposed only with manifest that shall be maintained in Form-10 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016.
- 10. The unit shall comply with the provisions under schedule III, Part D of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for import of waste paper B3020.
- 11. The manifest shall be endorsed by the despatcher, transporter and receiver of hazardous wastes. The endorsed copy of the manifest shall be furnished to TNPCB as and when such disposal is made.
- 12. The unit shall ensure that all provisions of Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 as amended are complied with while handling hazardous waste.

அகம் தூய்மை வாய்மைக்கு ! புறம் தூய்மை வாழ்வுக்கு !



- 13. The authorization is subject to the terms and conditions as may be specified in the Rules for the time being in force under the Environment (Protection) Act, 1986 and the conditions mentioned in the Schedule A & B.
- 14. The unit shall not store the Hazardous waste generated outside the premises of the unit.

15. The unit shall maintain the records of hazardous and other wastes purchased in passbook issued by the TNPCB along with authorisation.

Digitally signed by R.

R. KANNAN

KANNAN Date: 2017.06.22 14:47:15 +05'30'

Member Secretary

Tamil Nadu Pollution Control Board

Chennai

To

CHIEF GENERAL MANAGER (BOARD PLANT)

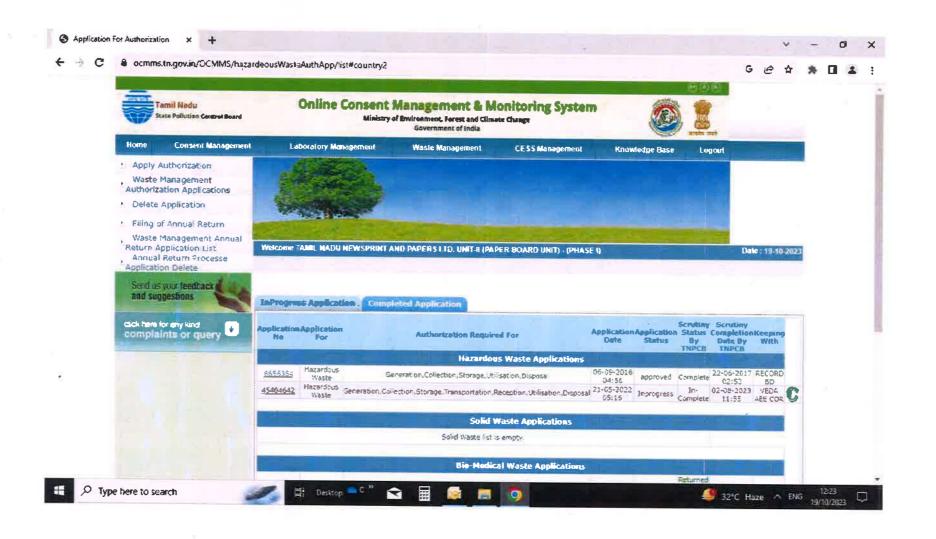
TAMIL NADU NEWSPRINT AND PAPERS LTD. UNIT-II (PAPER BOARD UNIT)

Mondipatty, K. Periyapatti & Chettichathram villages

Pin:621306

# Copy to:

- 1. The JCEE-Monitoring, Tamil Nadu Pollution Control Board, Tiruchirappalli.
- 2. The District Environmental Engineer, Tamil Nadu Pollution Control Board, THIRUCHIRAPALLI.





#### ANALYZER CALIBRATION LOG



TMPL-UNIT-II	Model: S710 - MULTOR	SICK INDIA PVT LTD
Date: 24.01.2023	Equipment Number : 1, 5710 (S.N716185)	Done by : Preveen Ayyappan / Witness by : Mr. Rajeyskums: I TNPL.)
1 Analyser Potation : STACK-DEM		Cylinder Data is Win Confentration (10 Litro-1)
CONTRACTOR OF THE PROPERTY OF	LE STATE OF	Zen Gas (Naji dia ONI) yang Naj

a Analyz

S.N. Cylinder NO	Cylinder NO Date of Expliny	Expiry V	Cylinder Value (unit)	Value Calibration observation Ca	Calibration Value	Observation	Initials of Reviewers		Repostability Drift		
		10054	1001	100		SIPL	TNPL				
1	108863	NI	Zero gas (SOZ)	99,999 %	0.01 ppm	-0.000 %	0:00 ppm	0.05 %			116
_			Zero gas (NC')	99,939 %	0.000 ppm	-1.023 %	0.00 ppm	0.05 %			1.5%
			Zero gas (CC)	99,039 %	0.010 ppm	2.30 %	0.00 ppm	0.05 %			1%
		-	Zèro Gas (C2)	99,909 %	0.10 %	0.27 %	8.00%	0.01%			
2	28147	22:11:2023	Test gas (SO2)	416 ppm	378 ppm	1,8%	411 ppm.	0.23 %			1%
		-	Test gas (ND)	265 ppm	260 ppm	1.0 %	261 ppm	0.10%			1%
			Test Gas ( CC)	364 ppm	339 ppm	0.5%	361 ypm	D.10.%			1%
			Instrument Ac	20.8 %	21.0%	10015	20.99%	0.00%			1%

#### distant

- Analyser Measuring Technology: NOIR NOI4-Dispersive Infrared Radiation.
- Calibration Due Date : 24.01.2024

granyytan.

#### Minutes of Meeting between Knowledge Lens Pvt. Ltd and TamilNadu Newsprint and paper LTD Unit 2

Date of Arrival to Site	Date of Leaving the Site	Location	
13-07-2023	15-07-2023	Manaparai	_

TamilNadu Newsprint and paper LTD Unit 2	Knowledge Lens Private Limited
Mr. R.Kandhavel AGM(Inst.) Mr. J.Niranjankumar AM(Inst.) Mr. E.Leningoven PE(Inst.)	Mr. Jawad Hussain

- 11 Knowledge Lens Engineers arrived at site on 12th July 2023. 2. The Fuji analyzer, which had been repaired, was brought back from the office and successfully connected by
  - Knowledge Lens Engineers to the Lime Kiln station. 3. Knowledge Lens Engineers done the manual and remote calibration to the LK station full analyzer successfully.
  - Knowledge Lens Engineer connected the RB analyzer and done the calibration successfully.
  - 4. Knowledge Lens Engineer configured the RB station H2S parameter in the centralPC and made the data live in
  - 5. Knowledge Lens Engineer configured the CLO2 station datalogger SCN103L\_236 and made the data live in the TNPCB server.
- 6. Knowledge lens Engineers left the site on 15th July 2023. TNPL Remark:
  - 1. Paramagnetic oxygen analyser yet to be re installed in limekiln Fuji analyser after repair.
    - 2. Both lime kiln and Recovery Boiler Full analysers were kept in observation.

- 1. In order to avoid data breakage or data loss please provide 24\*7 power supply to the analyzer and Data Acquisition Hardware system(DAS) by giving power supply from UPS etc. Done
- 2. Without the advice of GLens engineer don't change the USB's connected to the Device, as it results in configuration mismatch and data loss in PCB servers.
- 3. Provide proper Grounding at the place where Analyzers and Glens Data logger installed: Completed
- 4. If internet is provided through SIM, regularly check whether SIM is recharged for internet or not.
- 5. Industry should not switch off GLens device or Analyzers without giving prior information to PCB's, because it results in data loss.

In-case of any issues please contact to our support number at: +91 72910 00123 (Or) email us at: glens@knowledgelens.com

TamilNadu Newsprint a Unit 2	nd paper LTD	Knowledge Lens I	Private Limited
Name	Signature	Name	Signature
Mr. R.Kandhavel AGM(Inst.) Mr. J.Niranjankumar AM(Inst.) Mr. E.Leningoven PE(Inst.)	storywin a	Mr. Jawad Hussain	15/7/2023

# Knewledge Lens Accelerating Actionable Insights



#### TAMIL NADU NEWSPRINT AND PAPERS LIMITED, UNIT – II MONDIPATTI – 621 306

SRP-INST/F-05

#### INSTRUMENT CALIBRATION RECORD FOR STACK ANALYZERS (CEMS)

Tag Number	1AI27866 (SO2), 1AI27865 (NOX), 1AI 27864(O2)	Quality Plan Number	1MS/U2/SRP-INST/MP-01
Make	FUJI	Work Instruction Number	IMS/U2/SRP-INST/SOP-09
Model	ZREABF43	Calibrated Range	As per Analyzer Calibration Range setting
Description	Lime Kiln CEMS – C	Continuous Emission Mor	nitoring System

Master Instrument: Nitrogen and Composition of Calibration gases

Calibration Gases Validity: 20/04/2024

Accuracy in percentage (%): +/-1

#### Zero Calibration:

Cylinder Composition	components	Before Calibration in (PPM)	After Calibration in (PPM)	Drift Observation in %
	02	0.03	0.2	0.03%
N2 99.99%	SO2	7.2	1.2	0.05%
	NO	5.2	0.5	0.04 %

#### Span Calibration:

Cylinder Composition	Calibration in (PPM)	After Calibration in (PPM)	Drift Observation in %
02 10.25 Vol %	10.20 %	10.25%	0.01%
SO2 1633 PPM	1645 PPM	1638 PPM	0.03%
NO 1633 PPM	1620 PPM	1635 PPM	0.02%

Remarks:

1. Error % within allowed tolerance YES / NO

Calibrated On: 14.07-2023

Calibrated By:

· Anni

Next Due On: 13. D1. 2024

Reviewed But A Ville



#### TAMIL NADU NEWSPRINT AND PAPERS LIMITED, UNIT - II MONDIPATTI - 621 306

SRP-INST/F-05

#### INSTRUMENT CALIBRATION RECORD FOR STACK ANALYZERS (CEMS)

Tag Number	1AI25194 (SO2), 1AI25196 (NOX), 1AI 25193(O2)	Quality Plan Number	IMS/U2/SRP-INST/MP-01
Make	FUJI	Work Instruction Number	IMS/U2/SRP-INST/SOP-09
Model	ZREABF43	Calibrated Range	As per Analyzer Calibration Range setting
Description	Recovery Boiler CEMS	- Continuous Emission	Monitoring System

Master Instrument: Nitrogen and Composition of Calibration gases

Calibration Gases Validity: 20/04/2024

Accuracy in percentage (%): +/-1

#### Zero Calibration:

Cylinder Composition	Components	Before Calibration in (PPM)	After Calibration in (PPM)	Drift Observation in %
	02	0.02	0.2	0.03 %
N2 99.99%	SO2	3.2	1.5	0.06 %
	NO	2,4	0.7	0.05 %

#### Span Calibration:

Cylinder Composition	Before Calibration in (PPM)	After Calibration in (PPM)	Drift Observation in %
02 10.25 Vol %	10 %	10.28%	0,01%
SO2 1633 PPM	1640 PPM	1640 PPM	0.04%
NO 1633 PPM	1645 PPM	1638 PPM	0.03 %

#### Remarks:

1. Error % within allowed tolerance YES / NO

Calibrated On: 14.07.2023

Calibrated By: Juny

Next Due On: 13-01-2024 Reviewed Bay AVIN



#### TAMIL NADU NEWSPRINT AND PAPERS LIMITED, UNIT - II MONDIPATTI - 621 306

SRP-INST/F-05

#### INSTRUMENT CALIBRATION RECORD FOR SPM

Description	Lime Kiln Suspended Particulate Monitoring system			
Model	DR290	Calibrated Range	0 -250 mg/Nm3	
Make	DURAG	Work Instruction Number	IMS/U2/SRP-INST/SOP-10	
Tag Number	1AI27867	Quality Plan Number	IMS/U2/SRP-INST/MP-01	

Type of Calibration: Optical Calibration

Accuracy in percentage (%): +/-1

#### Calibration Report:

	Concentration	Instrumen (mg/l	% of Error	
Analyzer Cycle	(mg/Nm3)	Before Calibration	After Calibration	% of Error
Zero	0.00	3.5	0.2	0.01 %
Span	70 % (Optical Calibration)	179	178	0.025 %

Remarks:

L. Drift % within allowed tolerance YES / NO

Calibrated On: 14, 04.2028

Calibrated By: Jum

Next Due On: 13 01-2024

Reviewed By: J.A. W.



#### TAMIL NADU NEWSPRINT AND PAPERS LIMITED, UNIT - II MONDIPATTI - 621 306

SRP-INST/F-05

#### INSTRUMENT CALIBRATION RECORD FOR SPM

Description	Recovery Boiler Suspended Particulate Monitoring system			
Model	DR290	Calibrated Range	0 -250 mg/Nm3	
Make	DURAG	Work Instruction Number	IMS/U2/SRP-INST/SOP-10	
Tag Number	1AI25197	Quality Plan Number	IMS/U2/SRP-INST/MP-01	

Type of Calibration: Optical Calibration

Accuracy in percentage (%): +/- 1

#### Calibration Report:

	Concentration	Instrument Reading (mg/Nm3)		Drift Observation
Analyzer Cycle	(mg/Nm3)	Before Calibration	After Calibration	in %
Zero	0.00	3,5	0.2	0.01%
Span	70 % (Optical Calibration)	175	179	0.03%

Remarks:

1. Drift % within allowed tolerance YES / NO

Calibrated On: 14.01.2023

Calibrated By:

Next Due On: 13.01.2024

Reviewed By: NyiW

# Hereot Exxera Care Systams (F) Lid.

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Chennai - 600 083.

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Lairerstery herviess Division

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## TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/005/210423

Address of the Client

. Unit-II Mondipatti Village, K.Periyapatti Post, Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

: Fugitive Emission

Sample Mark

: Hardwood Chipper Screen Area

Sample Drawn By Sampling/received Date

: Hubert Enviro Care Systems (P) Ltd : 21/04/2023 -24/04/2023

Analysis Commenced On : 24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.007	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.20	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.039	ASTM D 2914: 2014
4	Carbon Monoxide	ան∖ույ	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.051	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m'- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPRAKASAM. M Lab Manager

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# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Liberatory Services (Nybelos

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# TEST REPORT

Page: | of |

Name of the Client

: M/s. Tamilnado Newsprint and Paper Limited.,

Report No. : HECSL/FE/006/210423

Address of the Client

. Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

: Fugitive Emission

Sample Mark

; SRP- Cauticizer Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Analysis Commenced On : 24/04/2023

Sampling/received Date : 21/04/2023 -24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.013	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.036	NIOSH 0600: 1984
3	Sulphur Diexide	mg/m³	0.029	ASTM D 2914: 2014
4	Carbon Monoxide	ng/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.040	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter.

""End of Report\*\*\*

Verified By



Authorized Signatory

SIVAPRAKASAM. M Lab Manager

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HECS/Q/FMT/50

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# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in Lakestony Socrices Wirinios

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/007/210423

Address of the Client

· Unit-II Mondipatti Village, K.Periyapatti Post.

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

; Fugitive Emission

Sample Mark

; Lime Crusher Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 21/04/2023 -24/04/2023

Analysis Commenced On: 24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method
ı	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) ; 2004
2	Particulate Matter	mg/m³	0.40	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.024	ASTM D 2914; 2014
4	Carbon Monoxíde	ing/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.015	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m<sup>3</sup>- Milligrams per cubic meter.

----End of Report\*\*\*

Verlied By



Authorized Signatory

SIVAPRAKASAM, M

Lah Manana

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HECS/Q/FMT/50

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/003/210423

Address of the Client

Unit-II Mondipatti Village, K.Periyapatti Post, Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

: Fugitive Emission

Sample Mark

; Chemical Additive Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date : 21/04/2023

21/04/2023 -24/04/2023

Analysis Commenced On : 24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.05	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.37	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.030	ASTM D 2914; 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0,05)	NIOSH 6004: 1984
5	nitrogen axides	mg/m³	0.059	NIOSH 6014: 1994

Note:-BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter.

\*\*\*End of Report\*\*\*

Verified By



Authorized Signatory

SIVAPRAKASAM. M

Lab Manner

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Chennal - 600 083,

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# TEST REPORT

Page: | of |

Name of the Client

: M/s. Tamilnado Newspriot and Paper Limited.,

Report No. : HECSL/FE/004/210423

Address of the Client

. Unit-II Mondipatti Village, K.Periyapatti Post, Manapparai Taluk, Trichy (Dt)- 621306, Famil Nadu

Report Date: 29/04/2023

Sample Description

: Fugitive Emission

Sample Mark

: Ash Handling Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 21/04/2023 -24/04/2023

Analysis Commenced On: 24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results .	Test Method
Ī	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.250	NIOSH 0600; 1984
3	Sulphur Dioxide	mg/m³	0.026	ASTM D 2914; 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.029	NIOSH 6014: 1994

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m²- Milligrams per cubic meter. \*\*\*End of Report\*\*\*

Authorized Signatory

<sup>1.</sup> The report in fall or part shall not be used for any promotional or publicity purpose without written consont by NECS organization. 2. Samples are not drawn by NECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test larges will not be retained more than 16 days from the date of issue of test report. 4. Under no cheumstances lab accepts any liability or loss / stamage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be reported for the Information started by clients related test amples tested.

HECS(C)(EMT/SO)

# luter Four Care Systems (F) Ltd.

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

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# TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 4 HECSL/FE/001/210423

Address of the Client

. Unit-II Mondipatti Village, K.Periyapatti Post, Manapparai Taluk, Trichy (Dt)- 621386, Tamil Nadu

Report Date: 29/04/2023

: Fugitive Emission

Sample Description Sample Mark

: Coal Storage Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 21/04/2023 -24/04/2023

Analysis Commenced On: 24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/in³	0.006	IS 5182 (Part - 22) : 2004
2	Particulate Matter	ខាg/m³	0.38	NIOSH 0600: 1984
3	Sulphur Dioxide	ing/m³	0.012	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m²	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	ing/m³	0.054	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m2- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPGAKASAM, M Lab Manager

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# Report Device Care Systems (Fills.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

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## TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/002/210423

Address of the Client

. Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

; Fugitive Emission

Sample Mark

: Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date : 21/04/2023 -24/04/2023

Analysis Commenced On : 24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	BLQ(LOQ 0.0001)	1S 5182 (Part - 22) : 2004
2	Particulate Matter	mg/in³	0.232	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.018	ASTM D 2914: 2014
4	Carbon Monexide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0,021	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPRAKASAM. M

Lab Manager

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# 18, 92nd Street, Ashok Nagar,

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# TEST REPORT

Page: Lof I

Name of the Client

: M/s. Tamiliadu Newsprint and Paper Limited.,

Report No. - HECSL/FE/005/230523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamii Nadu

Report Date: 29/05/2023

Sample Description

Fugitive Emission

Sample Mark

: Hardwood Chipper Screen Area : Hubert Enviro Care Systems (P) Ltd

Sample Drawn By

Sampling/received Date Analysis Commenced On : 24/05/2023

-24/05/2023 : 22/05/2023

Completed On: 29/05/2023

S.No.	Parameters	Units	Results	Test Method
]	Lead	mg/m³	0.005	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.26	NIOSH 0600, 1984
3	Sulphur Dioxide	mg/m³	0,043	ASTM D 2914; 2014
4	Carbon Monoxide	տ <b>ք</b> /տ <sup>յ</sup>	BLQ(LOQ 0.05)	RIOSE 6004 1984
5	nitrogen oxides	mg/m³	0.047	NiOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m2- Milligrams per cubic meter. \*\*\*End of Report\*\*\*





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Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in SACAR SEAR SARANGERS BENEVER

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## TEST REPORT

Page: Lof I

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 1 HECSL/FE/006/230523

Address of the Client

Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 29/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark

: SRP- Cauticizer Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Etd

Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On : 24/05/2023

ZEIOSIENZO W

Completed On: 29/05/2023

S.No.	Parameters	Units	Results	Test Method
ı	Lead	mg/m³	0.015	1\$ 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m*	0.042	NIOSH 0600 1984
3	Sulphur Dioxide	mg/m'	0.034	ASTM D 2914 2014
4	Carbon Monoxide	mg/m²	BLQ(LOQ 0.05)	NJOSH 6004-1984
5	nitrogen oxides	mg/m²	0.045	NIOSH 6014 1994

Note:-BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m²- Milligrams per cubic meter.

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Authorized Signatory
D. ANUSUYA

Deputy Quality Manage

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Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in 基础轮的现在分词 医神经病 化二十二氢氢键

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## TEST REPORT

Page: Lof L

Name of the Client

: M/s. Tamiluadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/007/230523

Address of the Client

: Unit-II Mondipatti Village, K. Periyapatti Post,

Report Date: 29/05/2023

Manapparai Taluk, Trichy (D1)- 621306, Tamil Nadu

Sample Description
Sample Mark

Fugitive Emission Lime Crusher Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On : 24/05/2023

Completed On: 29/05/2023

S.No.	Parameters	Units	Results	Test Method
Ī	Lead	mg/m²	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) 2004
2	Particulate Matter	mg/m³	0.45	NIOSH 0600: 1984
3	Sulphur Dioxide	n₃g/m³	0.028	ASTM D 2914 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004; 1984
5	nitrogen oxides	mg/m³	0.019	NIOSH 6014; 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m³- Milligrams per cubic meter.

\*\*\*End of Report\*\*\*

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Authorized Signatory

D. ANUSUYA Deputy Quality Manage

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Chennai - 600 083.

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## TEST REPORT

Page: Lof I

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/003/230523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 29/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark

: Chemical Additive Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On : 24/05/2023

Completed On: 29/05/2023

Parameters	Units	Results	Test Method
Lend	mg/m³	0.06	IS 5182 (Part - 22) : 2004
Particulate Matter	mig/m³	0.42	NIOSH 0600; 1984
Sulphur Dioxide	mg/m³	0.036	ASTM D 2914: 2014
Carbon Monoxide	ıng/m³	BLQ(LOQ 0.05)	NIOSIR 6004; 1984
nitrogen oxides	mg/m³	0.0582	NIOSH 6014: 1994
	Lend Particulate Matter Sulphur Dioxide Carbon Monoxide	Lend mg/m³  Particulate Matter ng/m³  Sulphur Dioxide mg/m³  Carbon Monoxide mg/m³	Lend         mg/m³         0.06           Particulate Matter         mg/m³         0.42           Sulphur Dioxide         mg/m³         0.036           Carbon Monoxide         mg/m³         BLQ(LOQ 0.05)

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m2- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory

D. ANUSUYA Deputy Quality Manager

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# TEST REPORT

Page: Lof L

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. FHECSL/FE/004/230523

Address of the Client

: Unit-Il Mondipatti Village, K.Periyapatti Post,

Report Date: 29/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamii Nadu

Sample Description

Fugitive Emission

Sample Mark

: Ash Handling Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On : 24/05/2023

Completed On: 29/05/2023

S.No.	Parameters	Units	Results	Test Method
l l	Lead	nig/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m²	0.264	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.022	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m²	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxídes	mg/m³	0.034	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m<sup>3</sup>- Milligrams per cubic meter.

\*\*\*End of Report\*\*\*





Authorized Signatory
D. ANUSUYA
Deputy Quality Manager

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### TEST REPORT

Page: Lof I

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No : HECSL/FE/001/230523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 29/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark

: Coal Storage Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On : 24/05/2023

Completed On: 29/05/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/n),	0.008	1S 5182 (Part - 22) ; 2004
,	Particulate Matter	mg/m³	0.33	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0,014	ASTM D 2914: 2014
+ :	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.058	NIOSH 6014: 1994

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m²- Milligrams per cubic meter. \*\*\*End of Report\*\*\*





**Authorized Signatory** D. ANUSUYA Deputy Quality Manages

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 1 HECSL/FE/002/230523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 29/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark

: Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd ...

Sampling/received Date

: 22/05/2023

-24/05/2023

Analysis Commenced On: 24/05/2023

Completed On: 29/05/2023

S.No.	Parameters	Units	Results	Test Method
<u>I</u>	l.ead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.246	NIOSH 0600: 1984
3	Sulphur Dioxide	ing/m²	0.013	ASTM D 2914; 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.025	NIOSH 6014: 1994

Note: Bl Q - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m2- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory
D. ANUSUYA Deputy Quality Manager

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/005/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Taniil Nadu

Report Date: 02/07/2023

Sample Description

: Fugitive Emission

Sample Mark Sample Drawn By : Hardwood Chipper Screen Area : Habert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.007	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.32	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.053	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.062	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m<sup>1</sup>- Milligrams per cubic meter.

\*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPRAKASAM. Na Lab Manager

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# Musert Cerco Care Systems (c) 173.

# 18, 92nd Street, Ashok Nagar, Chennai - 600 083.

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/006/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 02/07/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark

: SRP- Cauticizer Area

Sample Drawn By Sampling/received Date : Hubert Enviro Care Systems (P) Ltd

-27/06/2023 : 27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.018	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.052	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.043	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxídes	mg/m³	0.054	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m2- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPRAKASAM, NI Lab Manager

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/007/270623

Address of the Client

: Unit-II Mondipatti Village, K.Perlyapatti Post,

Report Date: 02/07/2023

Manapparal Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark

: Lime Crusher Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22); 2004
2	Particulate Matter	mg/m³	0,40	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.022	ASTM D 2914; 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.016	NIOSH 6014; 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m2- Milligrams per cubic meter. \*\*\*End of Report\*\*\*

Authorized Signatory

SIVAPRAKASAM. M Lab Manager

# Andre Berlie Sam Symbols (F) Lig.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Tarberratury constitute for being

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/003/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 02/07/2023

Sample Description

Fugitive Emission

Sample Mark

: Chemical Additive Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
I	Lead	mg/m³	0.09	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.050	NIOSH 0600: 1984
3	Sulphur Diexide	mg/m³	0,044	ASTM D 2914; 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.0596	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter.

\*\*\*End of Report\*\*\*



Anthorized Signatory

SIVAPRAKASANI. M Lab Manager

## Induct Environment Sear Symbolic (2) etc.

#18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Laboratery Services Blyisina

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/004/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 02/07/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Fugitive Emission

Sample Mark

: Ash Handling Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.240	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.016	ASTM D 2914: 2014
4	Саг <del>б</del> ол Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.026	NIOSH 6014; 1994

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m2- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPRAKASAM Lab Manager

## inden Enviro Caro Principo (P) (1941.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in Colorador morving a 1910 blanc

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/001/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 02/07/2023

Address of the Chem

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark Sample Drawn By : Coal Storage Area : Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.006	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.27	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.012	ASTM D 2914: 2014
4	Carbon Monoxide	nig/ni³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	ng/m³	0.042	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m<sup>3</sup>- Milligrams per cubic meter.

\*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPRAKASAM.

Lab Manager

# Hand Evelouse Season (7) Ltd

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/002/270623

Address of the Client

Sample Description

: Unit-fl Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 02/07/2023

Sample Mark

: Fugitive Emission : Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
 I	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22): 2004
2	Particulate Matter	mg/m³	0.258	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.018	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m²	0.034	NIOSII 6014: 1994

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter. ""End of Report"



**Authorized Signatory** 

SIVAPHAKASAM. M

Lab Manager

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Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mall : labsales@hecs.in

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/005/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu: Fugitive Emission

Sample Mark

; Hardwood Chipper Screen Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/07/2023 -26/07/2023

Analysis Commenced On : 26/07/2023

2023 Completed On: 31/07/2023

S.No.	Parameters	Units	Results	Test Method
L	Lead	mg/m³	0.008	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/ni³	0.16	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.026	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0.038	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter.
""End of Report"



Authorized Signatory
Dr. RAJKUMAG SAMUEL

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Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in (Chemical & Biological Testing) Recognized by MoEF, BIS FSSAI Notified Laboratory ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: Lof 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. | HECSL/FE/006/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamii Nadu : Fugitive Emission

Sample Mark

: SRP- Cauticizer Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 26/07/2023

26/07/2023 -26/07/2023

Analysis Commenced On : 26/07/2023

Completed On: 31/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/nt³	0.014	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.027	NIOSH (1600: 1984
3	Sulphur Dioxide	mg/m³	0.022	ASTM D 2914; 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0.027	NJOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter.

""End of Report"

Audhorized Signatory

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Shiplics are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the jest from will not be missioned more than 18 days from the date of issue of less report. 4 United up characteristics also accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to time test from 5. HECS will not be responsible for the information shared by clients related to samples tested.

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#### TEST REPORT

Page: f of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/007/260723N

Report Date: 08/08/2023

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Fugitive Emission

Sample Mark

: Lime Crusher Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/07/2023 -26/07/2023

Analysis Commenced On : 26/07/2023

Completed On: 31/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/ni³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.30	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.29	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0.07	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m<sup>2</sup>- Milligrams per cubic meter.

\*\*\*End of Report\*\*\*



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Ph; 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: I of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. HECSL/FE/003/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Fugitive Emission

Sample Mark

: Chemical Additive Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/07/2023 -26/07/2023

Analysis Commenced On : 26/07/2023

Completed On: 31/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lcad	mg/m³	0.05	JS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m²	0.042	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/in³	0.028	ASTM D 2914: 2014
4	Carbon Monoxide	mg/nt³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen exides	nig/ni³	0.046	NIOSH 6014: 1994

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m2- Milligrams per cubic meter. \*\*\*End of Report\*\*\*

1. The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the last items will not be retained more than 15 days from the date of lasts of proving Aunitor proving a Aunitor proving a function of the last report. 5. The test results related only to the test fems. 6. HECS with not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited...

Report No. : HECSL/FF/004/260723N

Address of the Client

: Unit-If Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu Fugitive Emission

Sample Mark

: Ash Handling Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 26/07/2023 -26/07/2023

Analysis Commenced On: 26/07/2023

Completed On: 31/07/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22): 2004
2	Particulate Matter	mg/m³	0.170	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.026	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxídes	ntg/m³	0.024	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ-Limit of Quantification, mg/m3- Milligrams per cubic meter. ""End of Report""

Authorized Signatory

1. The report in full or part shall not be used for any promotional or publicity purpose without written consent by (IECS organization) \$\frac{2}{2}\$ Employs or not thewn by (IECS unless or otherwise mendloned). Unless specifically requested by customer the test items will not be retained more than 15 days from the deleted lister of less indicated. 4. United the deleted in the test items, 6. HECS will not be responsible for the information charge caused by use or misuse of test report after invoicing or issue of test report.

5. The test results related to eat tested. HECS/Q/FMT/50

Chennal - 600 083.

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### TEST REPORT

Page: f of 1

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited...

Report No. : HECSL/FE/001/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu : Fugitive Emission

Sample Mark

: Coal Storage Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/07/2023 -26/07/2023

Analysis Commenced On : 26/07/2023

Completed On: 31/07/2023

S.No.	Parameters	Units	Results	Test Method
]	Lead	mg/m³	0.004	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.25	NIOSH 0600: 1984
3	Sulphur Dioxide	nig/m³	0.022	ASTM D 2914; 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0.028	NIOSH 6014; 1994

\*\*\*End of Report\*\*\*

Committee (Committee Committee Commi

Authorized Signatory

DE PRIKUMEN SAMUL

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Safeting of part of them by HECS unless or otherwise mentioned. 3. Unless specifically requested by continuer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no distributiones to accepte any liability or less / damage caused by use or misuse of test report after involving or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/002/260723N

Report Date: 08/08/2023

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark

: Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/07/2023 -26/07/2023

Analysis Commenced On : 26/07/2023

Completed On: 31/07/2023

S.No.	Parameters	Units	Results	Test Method
J	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	nig/ni <sup>3</sup>	0.47	NIOSH 0600: 1984
3	Solphur Dioxide	mg/m³	0.013	ASTM D 2914: 2014
' 1	Carbon Monoxide	nig/ni³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0.027	NIOSH 6014; 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter.

\*\*\*End of Report\*\*\*



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HECS/Q/FMT/50

# 16, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in ายสมมักราช เมษาสาราชาวิทยาลาสัมพิสาราชาวิทยาล

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TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamifnadu Newsprint and Paper Limited.,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report No. : HECSL/FE/005/250823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

: Fugitive Emission

Sample Mark

: Hardwood Chipper Screen Area

Sample Drawn By
Sampling/received Date

: Hubert Enviro Care Systems (P) Ltd., : 25/08/2023 -25/08/2023

Analysis Commenced On : 25/08/2023

Completed On: 30/08/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.005	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.24	NYOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.033	ASTM D 2914; 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	nig/ni³	0.046	NIOSH 6014: 1994

"End of Report"



Authorized Signatory

DI, RAJKUMAR SAMUEL Director Technical

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HECS/Q/FMT/50

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# 18, 92nd Street, Ashok Nagar, Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page 1 of f

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/006/250823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Manapparal Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Fugitive Emission : SRP- Cauticizer Area

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/08/2023 -25/08/2023

Analysis Commenced On: 25/08/2023

Completed On: 30/08/2023

S.No.	Parameters	Units	Results	Test Method
1	1.ead	mg/m³	0.019	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/ni³	0.021	NIOSH 0600: 1984
3	Sulphur Dioxide	មាន/ខា³	0.014	ASTM D 2914: 2014
4	Carbos Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0.022	NIOSH 6014: 1994

"End of Report"



Authorized Signatory

Di, Rajkumar samuel Director Tochnical

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# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: Loft

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/007/250823N

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Address of the Client

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Fugitive Emission

Sample Mark

: Lime Crusher Arca : Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn-By

Sampling/received Date

: 25/08/2023 -25/08/2023

Analysis Commenced On : 25/08/2023

Completed On: 30/08/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	nig/m³	0.39	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.047	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	nig/ni³	0.011	NIOSH 6014: 1994

\*\*\*End of Report\*\*\*



Authorized Signatory or rabijiman **samuel** Director Technical

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#18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 3 HECSL/FE/003/250823N

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Address of the Client

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Fugitive Emission

Sample Mark

: Chemical Additive Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/08/2023 \*25/08/2023

Analysis Commenced On: 25/08/2023

Completed On : 30/08/2023

S.No.	Parameters	Units	Results	Test Method
l	Lead	mg/m³	0.006	IS 5182 (Part - 22) : 2004
2	Particulate Matter	nig/m³	0.049	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.035	ASTM D 2914; 2014
4	Curbon Monoxide	mg/m³	BLQ(LQQ 0.05)	NIOSH 6004: 1984
5	Nitrogen exides	mg/m³	0.051	NIOSH 6014: 1994

\*\*\*End of Report\*\*\*



Authorized Signatory

Dr. RAJKUMAH SAMUEL Director Technical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances ist accepts any liability or loss / damage caused by use or inleuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50

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# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Soft and dispersional particles

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#### TEST REPORT

Page: Lof L

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited.,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report No. : HECSL/FE/004/250823N

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

: Fugitive Emission

Sample Description
Sample Mark

: Ash Handling Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/08/2023 -25/08/2023

Analysis Commenced On : 25/08/2023

Completed On: 30/08/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	nig/m³	0.155	NIOSH 0600: 1984
3	Sulphur Dioxide	nig/m³	0.021	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	nig/m³	0.033	NIOSH 6014: 1994

""End of Report"



Anthorized Signatory

Dr. RAJKUMAN SAMUEL Director Technical # 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Continue to Superior Continues

(Chemical & Biological Testing) Recognized by MoEF, BIS FSSAI Notified Laboratory ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: Lof 1

Name of the Client

1 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/001/250823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

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Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Mark

Fugitive Emission
Coal Storage Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/08/2023 -25/08/2023

Analysis Commenced On: 25/08/2023

Completed On: 30/08/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.007	1S 5182 (Part - 22) : 2004
2	Particulate Matter	n)g/m³	0.032	NIOSH 0600: 1984
3	Sulphur Dioxide	nig/m³	0.028	ASTM D 2914; 2014
4	Curbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0.036	NIOSH 6014: 1994

\*\*End of Report\*\*\*



Authorized Signatory

or, president Samuel Director Technical A. 自然文化的对应引动 图. 经分配 数。整理处理

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: Lof L

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/FE/002/250823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Fugitive Emission : Finishing House Area

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/08/2023 -25/08/2023

Analysis Commenced On: 25/08/2023

Completed On: 30/08/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) ; 2004
2	Particulate Matter	mg/m³	0.055	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.019	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	mg/m³	0.032	NIOSH 6014: 1994

"End of Report"



Authorized Signatory

Dr. RAJKUMAR SAMUEL Olrector Technical

HECS/Q/FMT/50

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances also accepts any liability or loss / demage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the lest flows. 6. HECS will not be responsible for the information shared by clients related to eamples tested.

HECS ICCIENT 150.

# Himoer Enviro Caro Systems (P) Ltd.

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

**Laboratory Services Division** 

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAl Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/FE/005/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

: Fugitive Emission

Sample Mark

: Hardwood Chipper Screen Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 25/09/2023

-25/09/2023

Analysis Commenced On: 25/09/2023

Completed On: 04/10/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	ing/in³	0.009	IS 5182 (Part - 22) ; 2004
2	Particulate Matter	mg/m³	0.031	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.047	ASTM D 2914: 2014
4	Carbon Monoxide	ng/m³	BY-Q(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.052	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, ing/m3- Milligrams per cubic meter. ""End of Report""



Authorized Signatory DE BAJKWMAN SAMUF: Director Tachelani

<sup>1.</sup> The roport in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS utiless or otherwise translored. 3. Unless specifically requested by customer file test items will not be relatived more than 15 days from the date of Isaue of lest report. 4. Under no circumstances lab accepts any information shandle caused by use or misuse of feet report after involving or issue of feet report. 5, The test results relate only to the test items. 6. HECS will not be responsible for the HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Laboratory Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAl Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

## TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/FE/006/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: Fugitive Emission

Sample Mark

; SRP- Cauticizer Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 25/09/2023

-25/09/2023

Analysis Commenced On: 25/09/2023

Completed On: 04/10/2023

Report Date: 04/10/2023

S.No.	Parameters	Units	Results	Test Method
i Lead		mg/m³	0.014	IS 5182 (Part - 22) ; 2004
2 Particu	late Matter	mg/m³	0.028	NIOSH 0600: 1984
3 Sulphu	r Dioxide	mg/m³	0.010	ASTM D 2914; 2014
4 Carbon	Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5 nitroge	n oxides	mg/m³	0.024	NIOSH 6014: 1994

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory Dr Kajkuidan Samuel Director Tachaical

<sup>1.</sup> The report in full or part shall not be used for any premotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise trendened. 3. Unless especifically requested by customer the test items will not be retained more than 15 days from the date of lesure of test report. 4. Under no circumstances lab accepts any information shared by elected to samples tested. But the test involving the responsible for the information shared by elected to samples tested. HECS/Q/FMT/50

# Hobert Enviro Caro Systems (Plant.

#18, 92nd Street, Ashok Nagar, Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

## **Laboratory Services Division**

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAl Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/FE/007/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparal Taluk, Trichy (Dt) - 621 306, Tamil Nadu

: Fugitive Emission ; Lime Crusher Area

Sample Mark

: Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By Sampling/received Date : 25/09/2023

-25/09/2023

Analysis Commenced On: 25/09/2023

Completed On: 04/10/2023

S.No.	Parameters	Units	Results	Test Method
1	Leid	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
2	Particulate Matter	mg/m³	0.035	NIOSH 0600: 1984
3	Sulphur Dioxide	m/g/m³	0.042	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.018	NIOSH 6014; 1994

Note:- BLQ - Below the Limit of Quantification, LOQ-Limit of Quantification, mg/m3- Milligrams per cubic meter. \*\*\*End of Report\*\*\*

iorized Signatory DE REUKUWAK SAMUEL **Gi**rector Technical

<sup>1.</sup> The report in full or part shall not be used for any premotional or publicity surpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or etherwise mendioned. 3. Unless specifically requested by distormer the test floring will not be resided more than 18 days from the date of issue of test report. 4. Under no chromostances tab accepts any information shared by clients related to samples tested.

In the second date of the seco HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar.

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Laboratory Services Division

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/FE/003/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu Fugitive Emission

Sample Mark

: Chemical Additive Area

Sample Drawn By

! Hubert Enviro Carc Systems (P) Ltd.,

Sampling/received Date : 25/09/2023 -25/09/2023

Analysis Commenced On: 25/09/2023

Completed On : 04/10/2023

S.No.	Parameters	Units	Results	Test Method
]	Lead	mg/m³	0.007	IS 5[82 (Pari - 22) : 2004
	Particulate Matter	mg/m³	0.56	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.031	AS'TM D 2914: 2014
4	Carbon Monexide	mg/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.054	NIOSH 6014; 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory OI. HAJKUMAH SAMUEL Olrector Technical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the lost items will not be retained more than 15 days from the date of issue of test report. 4. Under no discumstances had accepts any liability or loss / damage caused by use or misuse of lest report after involving or issue of test report. 5. The test results relate only to the lest thous. 6. HECS will not be responsible for the information abared by clients related to samples tested.

HECS/OF66T/60 HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

**Laboratory Services Division** 

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## TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/FE/004/250923

Address of the Client

: Unit-H, Mondipatti Village, K. Periyapatti Post,

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: Fugitive Emission : Ash Handling Area

Sample Mark

: Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By Sampling/received Date

Analysis Commenced On : 25/09/2023

: 25/09/2023 -25/09/2023

Completed On: 04/10/2023

Report Date: 04/10/2023

S.No.	Parameters	Units	Results	Test Method
I	Lead	mg/n <sub>1</sub> 3	BLQ(LOQ 0.0001)	IS 5182 (Part - 22) : 2004
	Particulate Matter	mg/m³	0.162	NIOSH 0600: 1984
	Sulphur Dioxide	nig/m³	0.025	ASTM D 2914: 2014
4	Carbon Monoxide	nig/m³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	nitrogen oxides	mg/m³	0.041	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter. ""End of Report""



Authorized Signatory DI. RAJKUWAR SAMUEL Director Technica!

<sup>1.</sup> The report in foll or part shall not be used for any promotional or publicity purpose without writion consent by HECS organization. 2. Samples are not drawn by HECS unless or efferwise mentioned. 3. Unless specifically requested by customer the rest times will not be estained more than 19 days from the date of issue of test report. 4. Under no chromatances to accepts any information shared by use of inferse of test report after invoicing or issue of test report. 5. The test results relate only to the last items. 0. HECS will not be responsible for the intermation shared by clients related to samples histed. HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083,

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

**Laboratory Services Division** 

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAI** Notified Laboratory ISO 9001, 14001 & 45001 Certified.

## TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/FE/001/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Perlyapatti Post,

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: Fugitive Emission

Sample Mark

: Coal Storage Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 25/09/2023

-25/09/2023

Analysis Commenced On: 25/09/2023

Completed On: 04/10/2023

Report Date: 04/10/2023

S.No.	Parameters	Units	Results	Test Method
1	Lead	mg/m³	0.009	IS 5182 (Part - 22) : 2004
2	Particulate Matter	nig/m³	0.047	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.011	ASTM D 2914: 2014
4	Carbon Monoxide	mg/nt³	BLQ(LOQ 0.05)	NIOSH 6004: 1984
5	Nitrogen oxides	ing/m³	0.063	NIOSH 6014: 1994

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter. ""End of Report"



authorized Signatory

<sup>1.</sup> The report to full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or enterwise manifolded 3. Unless specifically requested by sustement he test flows will not be retained more than 15 days from the date of fastic of test report. 4. Under no discinnistances lab accepts any informations handly elimits related to samples tosted.

Informations handly elimits related to samples tosted. HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

## Laboratory Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS FSSAI Notified Laboratory ISO 9001, 14001 & 45001 Certified.

## TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/FE/002/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

Fugitive Emission

Sample Mark

: Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 25/09/2023 -25/09/2023

Analysis Commenced On: 25/09/2023

Completed On : 04/10/2023

Report Date: 04/10/2023

S.No.	Parameters	Units	Results	Test Mcthod
ł	Lead	mg/m³	BLQ(LOQ 0.0001)	IS 5182 (Part - 22); 2004
2	Particulate Matter	nıg/m³	0.058	NIOSH 0600: 1984
3	Sulphur Dioxide	mg/m³	0.019	ASTM D 2914: 2014
4	Carbon Monoxide	mg/m³	BLQ(LOQ 0.0S)	NIOSH 6004: 1984
5	Nitrogen exides	mg/m³	0.034	NIOSH 6014: 1994

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/m3- Milligrams per cubic meter. \*\*\*End of Report\*\*\*



Authorized Signatory DI RAJKUMAN SAKUEL Directer Technical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by austomer the test items will not be reterined more than 15 days from the date of issue of test report. 4. Under no circumstances into accepts any liability or loss? I demage caused by uses or insuse of test report after invoicing or lessue of test report. 5. The test results relate only to the test kems. 6. HECS will not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50



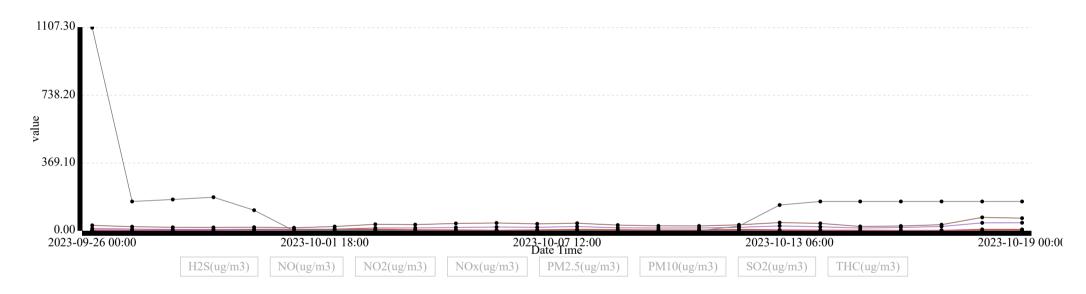
# **Average Report**

Tamilnadu Newsprint and Papers Limited UNIT II, Trichy

Created By:- TNPL, Created At:- 2023-10-20 09:23:46

From: 2023-09-26 00:00, To: 2023-10-19 00:00

## UNITII\_WEST\_GATE-daily - Average Data







20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Air Quality Survey - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

With reference to compliance of special condition of Air Quality Monitoring and Preservation mentioned in reference cited above, we are submitting the following reports for the period from Apr'23 to Sep'23.

- i) Report of Analysis (ROA) of Air Quality Survey comprising Ambient Air Quality, Fugitive Emission, Stack Emission and Ambient Noise survey carried out through M/s Hubert Enviro Care Systems, Chennai, a NABL accredited Laboratory.
- ii) Monthly summary report of continuous monitoring of ambient air quality & stack emission.

This is for your kind information and records.

Thanking you,

Yours faithfully,

FOR TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

- CC: (1) The Member Secretary, SEIAA, 3<sup>rd</sup> Floor, Panagal Maaligal, No.1 Jeenis Road, Saidapet, Chennai 600 005.
  - (2) The Member Secretary, TNPCB, Chennai 600 032.
  - (3) Zonal Officer, Central Pollution Control Board, South Zone Office, "Nisarga Bhawan", 1 st Floor, Thimmaiah Road, 7th 'D' Main, Shivanagar, Bengaluru-560 079.
  - (4) The Joint Chief Environmental Engineer, TNPCB,25, SIDCO Industrial Estate, Thuvakudi, Trichy 15.
  - (5) The District Environmental Engineer, TNPCB,25, SIDCO Industrial Estate, Thuvakudi, Trichy 15.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir.

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Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

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This is for your kind information and records.

Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC: (1) The Member Secretary, SEIAA, 3<sup>rd</sup> Floor, Panagal Maaligal, No.1 Jeenis Road, Saidapet, Chennai - 600 005.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Air Quality Survey - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

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- ii) Monthly summary report of continuous monitoring of ambient air quality & stack emission.

This is for your kind information and records.

Thanking you,

Yours faithfully,

FOR TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC: The Member Secretary, TNPCB, Chennai - 600 032.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Air Quality Survey - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

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- i) Report of Analysis (ROA) of Air Quality Survey comprising Ambient Air Quality, Fugitive Emission, Stack Emission and Ambient Noise survey carried out through M/s Hubert Enviro Care Systems, Chennai, a NABL accredited Laboratory.
- ii) Monthly summary report of continuous monitoring of ambient air quality & stack emission.

This is for your kind information and records.

Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC: Zonal Officer, Central Pollution Control Board, South Zone Office, "Nisarga Bhawan", 1 st Floor, Thimmaiah Road, 7th 'D' Main, Shivanagar, Bengaluru-560 079.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Air Quality Survey - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

With reference to compliance of special condition of Air Quality Monitoring and Preservation mentioned in reference cited above, we are submitting the following reports for the period from Apr'23 to Sep'23.

- i) Report of Analysis (ROA) of Air Quality Survey comprising Ambient Air Quality, Fugitive Emission, Stack Emission and Ambient Noise survey carried out through M/s Hubert Enviro Care Systems, Chennai, a NABL accredited Laboratory.
- ii) Monthly summary report of continuous monitoring of ambient air quality & stack emission.

This is for your kind information and records.

Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC: The Joint Chief Environmental Engineer, TNPCB,25, SIDCO Industrial Estate, Thuvakudi, Trichy - 15.



ROA/TNPL/19a

20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Air Quality Survey - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

With reference to compliance of special condition of Air Quality Monitoring and Preservation mentioned in reference cited above, we are submitting the following reports for the period from Apr'23 to Sep'23.

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Thanking you,

Yours faithfully,

FOR TAMIL NADUNEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC:

The District Environmental Engineer, TNPCB, 25, SIDCO Industrial Estate, Thuvakudi, Trichy - 15.

# Air Pollution Control (APC) system at TNPL - II

# **Fugitive Emission Control Measures**

**Dust Extraction system at transfer points** 





**Closed Coal Shed** 



# **Fugitive Emission Control Measures**

Closed belt conveyors used to transport coal from stock yard to boiler







# **Fugitive Emission Control Measures**

Water sprinkling system at coal storage yard

Mobile road dust cleaning machine





# **Air Pollution Control Measures**

### **Power Boiler**

Power Boiler Stack of height 100 m

Power Boiler Electro Static Precipitator (ESP) – 1&2







# **Air Pollution Control Measures**

### **Recovery Boiler & Lime Kiln**

Recovery boiler Stack of height 90 m with ESP

Lime kiln stack of height 54.8 m with ESP





# TNPL

### TAMIL NADU NEWSPRINT AND PAPERS LIMITED

#### BRIEF WRITE-UP ON DNCG & CNCG COLLECTION AND INCINERATION

As part of Mill Expansion Plan, TNPL installed a 400 TPD Hardwood Pulp mill, along with connected Chemical Recovery System. During the Pulping process, certain reduced Sulphur based Non-Condensable Gases (NCG) is generated which will create odorous environment, in and around the mill area. In order to have an odour free environment, a state of the art technology has been considered right at the concept stage of the project. Accordingly, a full fledged NCG collection and incineration system has been installed which plays a vital role in helping the pulp mill meet strict environmental regulations as well as being a good neighbour in the surrounding community.

There are two main sources of NCG in a pulping process. Some sources emit a small, but highly concentrated amount (Concentrated NCG or CNCG), while others emit large volumes with low concentrations (Dilute NCG or DNCG). During the process, Dilute NCG is generated in the Pulp mill digester and the Black liquor storage areas, while Concentrated NCG is generated in the Black liquor evaporation process. The DNCG and CNCG are collected and incinerated through exclusive systems, as described below:

#### **CNCG & Methanol Generation and incineration**

The foul condensate from the Black liquor Evaporation plant is stripped through LP steam or first effect vapour. After stripping the Foul condensate is received as "A" condensate, which is recycled back in the process and the stripper outlet gas (SOG) is further stripped through LP steam in a methanol column. From the stripper column, CNCG is generated and the methanol is recovered in liquid form.

Methanol generated is stored in a storage tank and then used as fired in the Lime Kiln.

In addition to the CNCG generated from the SOG stripping of Evaporation plant, the gases emanating from Vacuum pump shall also be collected and transferred to Lime Kiln through a steam ejector, for firing.

In case of Lime Kiln stoppage, the CNCG is routed through a flare system, where the gases are fired.

#### **Collection and incineration of DNCG**

All storage tanks from Evaporator plant (Weak Black Liquor, Spill Liquor, Condensate storage tanks, HBL tank) vents are connected through a flap valve to collect the DNCG. The DNCG shall be scrubbed with cooling water and then through a blower it is sent to the Chemical Recovery Boiler.

Similarly, all storage tanks from Recausticising plant (White Liquor tanks, Green Liquor tanks, Dregs tanks, Weak white liquor tank, Dilution tank, wash water tank) vents are connected to collect the DNCG, for subsequent firing in the Chemical Recovery Boiler.

The Pulp mill has a separate collection system for the DNCG gases from the Digesters, Pulp Discharge tank and the Black liquor storage tanks. The DNCG system forms part of the Hardwood digester. The system delivers the DNCG after necessary scrubbing and joins the DNCG collected from the Evaporator and Recausticizing area, and fired into the Chemical Recovery Boiler.



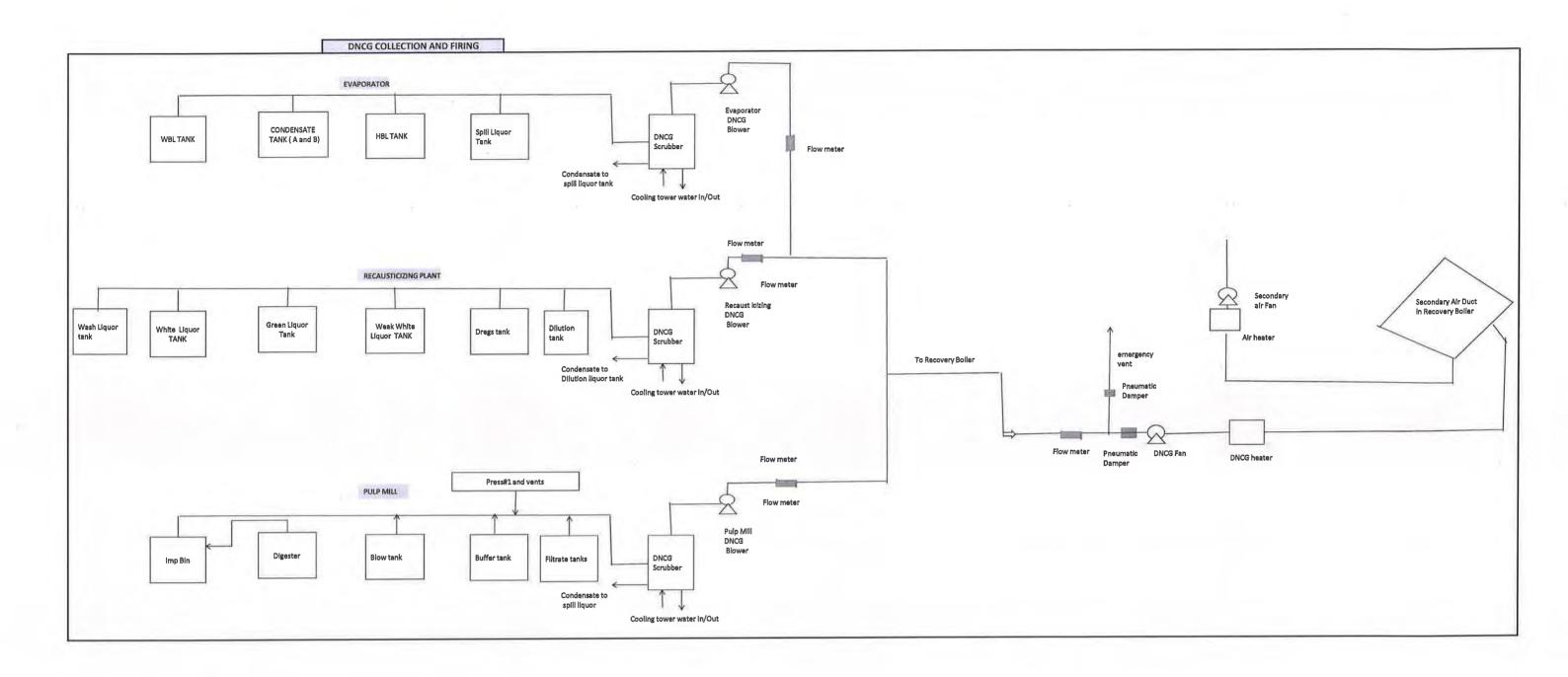
# TAMIL NADU NEWSPRINT AND PAPERS LIMITED

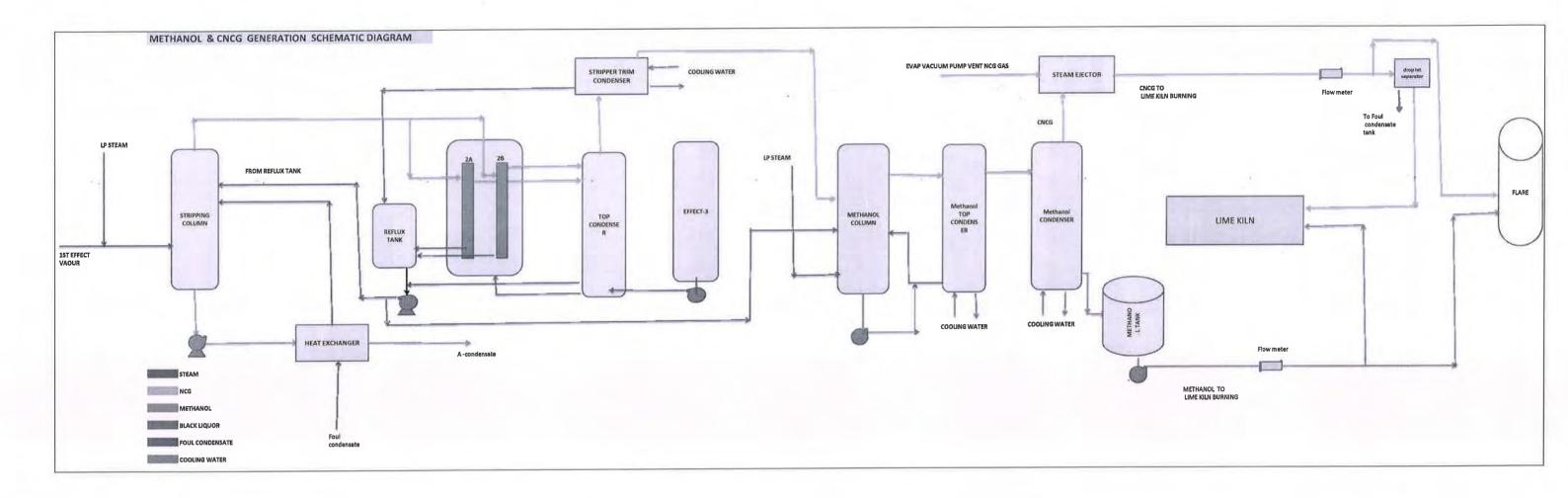
DNCG forms part of the secondary air in the Recovery Boiler. A DNCG fan in the Recovery Boiler receives gases from all the above areas and the gas pressure is raised to ensure entry of the DNCG without any interruption through the Secondary air duct. The DNCG fan speed is controlled by a Variable Frequency drive.

DNCG fan delivery first flows to the DNCG gas preheater. Gas is heated by both LP and MP steam gas preheater. Gas is preheated to match the secondary air duct temperature of 130-150 Deg C. After preheating gases are led to the secondary air duct.

A brief schematic diagram of the above systems is attached.

Capturing the CNCG and DNCG gases without allowing it into the atmosphere is a challenge. Yet, the reward can be significant. Not only the mill becomes odour free, but treating and recovering NCGs can also yield a "fuel" with significant heating value. This ensures a sustainable technology for mill operations, which aligns with the interest of the environment and society.





# Primary and secondary venturi scrubbers installed to control emissions from chemical recovery boiler





# STATUS OF IMPLEMENTATION OF CREP ACTION POINTS AS EVOLVED BY CPCB

S.NO	RESPONSIBILITY	IMPLEMENTATION SCHEDULE	STATUS OF COMPLIANCE
01.	Discharge of AOX kg/tonne of paper	AOX 1.5 Kg/tonne of paper within 2 years  AOX 1.0 Kg/tonne of paper within 5 years	The unit has obtained CTO for MEP Expansion comprising Pulpmill, Soda Recovery Plant & Lime Kiln on 15.07.2022. AOX is being maintained within 1.5Kg/tonne of Paper.
02.	Installation of lime kiln	Within 4 years	Lime Kiln with lime sludge reburning of capacity 250TPD is installed along with MEP and is in operation.
03.	Waste water discharge cu. M / tonne of paper	Less than 140 Cu. M / tonne of paper within 2 years. Less than 120 Cu. M / tonne in 4 years for units installed before 1992. Less than 100 Cu. M / tonne of paper per units installed after 1992.	The average waste water discharge per ton of paper production is maintained around 11 m <sup>3</sup> /Mt of paper produced.
04.	Odour control by burning the reduced sulfur emissions in the boiler/lime-kiln	Installation of odour control system within 4 years.	A full fledged Odour control system installed with collection and incineration of DNCG and CNCG firing is in place.
05.	Utilization of treated effluent for irrigation	Utilization of treated effluent for irrigation wherever possible	The treated effluent is fully utilized to irrigate 6.63 Lakhs of tree saplings in 674.64 Acres earmarked for green belt development including housing colony located in the Mondipatti Village and additional lands located in K. Periyapatti and Chettichatram through Drip irrigation.
06.	Color removal from the effluent	Indian Paper Manufacturers Association to take up project with Central Pulp & Paper Research Institute	The Raw effluent from the Pulpmill and Board Machine being treated in the Effluent Treatment plant consisting of Physico Chemical Treatment, Biological Treatment and followed by Dissolved Air Floatation Process (DAF) for colour reduction in the treated Effluent.

### Photograph of Road Sweeping Machine



### Wind Shelter Fence near Coal Yard





### Two Stage Oxygen Delignification (ODL) Reactors installed at Hardwood Pulpmill



1<sup>st</sup> Stage ODL Reactor 2<sup>nd</sup> Stage ODL Reactor



### Continuous Effluent Monitoring System @ TNPL UNIT-II





People for Process Automation

#### **CALIBRATION CERTIFICATE**

Plant

: TNPL Unit II Paper Board Effluent Treatment Plant

Analyser

: 1. Chemical oxygen demand (COD) Sensor CAS51D-AAC2A4\_1A Transmitter CM444-5150/0

2. Biochemical oxygen demand (BOD)

Sensor CAS51D-AAC2A4\_1A, Transmitter CM444-5150/0

Total Suspended Solids (TSS)

3. Total Suspended Solids

Sensor Model CUS51D-AAC1A3 (Sl.No.KB00E605T00) Transmitter Model CM442-37D6/0 (Sl.No. K7011F05G00)

Make

Endress + Hauser

Range

: 0-1000 mg/l

Calibration done on

22-06-2023

Calibration due on

22-12-2023

Sr.No.	Parameter	Sample tested at Lab (mg/l)	Analyzer reading Before Calibration (mg/l)	Analyzer reading after Calibration (mg/l)	Remarks
1.	COD	139	139.3	139.0	Acceptable
2.	BOD	11	11.3	11.0	Acceptable
3.	TSS	07	07.3	07.0	Acceptable

Tested by

Kannan S

(M/s Endress + Hauser)



# CALIBRATION CERTIFICATE Centre for Calibration

#### NAGMAN CALIBRATION SERVICES LLP



No.168/7, Chennai - Bangalore National Highway, Chembarambakkam, Chennai - 600 123. Tamilnadu. INDIA E-Mail : cfcchennai@nagman.com, calibration@nagman.com Site : www.nagman.com

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CO	-1		4	С

ULR-CC254823000007489F		Certificate Number: CFC2023-2	221-FS/7
Date of Issue : 11.03.2023			
Customer Name And Address		M/s.Tamil Nadu Newsprint and F Unit-II, Mondipatti Village, K.Periyapatti Post, Manapparai T Trichy District - 621 306, Tamilna	aluk,
Customer Reference		P.O.No. TEC/222325006371 Dat	ed 18.01.2023
Details of the Instrument			
Location		Treated Water to External Planta	tion
Machine Name / Number		-	
Description		Electromagnetic Flow meter	
Make		ABB	
Model		Process Master 632	
Serial Number		3K822100173222	
Identification Number		-	
Range		0 to 4500 m <sup>3</sup> /hr	
Operating Range		-	
Resolution		0.01 m <sup>3</sup> /hr	
Size		DN 400	
Medium		Water	
Accuracy		Not specified	
Equipment received on		On Site	
Condition of the equipment on rece	eipt	Good	
Calibration Procedure Number		CFC/WI-F02	
Method of Calibration		Comparison Method	
Date of Calibration		22.02.2023	
Date of Next Calibration Suggested		22.02.2024	
Calibration Environments			
Temperature		29.6°C	
Relative Humidity		53%	
Master Instrument Details	(The Standards used are traceable t	•	
Nomenclature	Certificate No.	Validity	Traceability
Ultrasonic Flowmeter	CFC2022-1450-FL/2	21-Sep-23	NAGMAN

#### Remarks

- 1. The above UUC was calibrated at Site.
- 2. UUC is defined as Unit Under Calibration.
- 3. The calibration certificate shall not be reproduced except in full without written approval of CFC.
- $4. \ \ The \ calculated \ expanded \ uncertainty \ includes \ repeatability, \ resolution \ \& \ uncertainty \ on \ measurements.$
- 5. The measurement results relate only to the item calibrated.
- 6. The decision rule will be applied based on Statement of Confirmity requested by the Customer.
- 7. The results are provided as observed without any adjustments.
- 8. The Uncertainty stated is the expanded uncertainty of measurement obtained by multiplying the standard uncertainty by the coverage factor correspond to confidence level of 95%.

**Checked By** 

Digitally signed by DS NAGMAN CALIBRATION SERVICES LLP 01

P.Raju Reason: Calibration Certificate Location: Chennai

Team Member Date: 2023-03-11 11:02+05:30







**Authorised Signatory** 

D.Arun Team Leader

Page 01 of 02



## CALIBRATION CERTIFICATE Centre for Calibration NAGMAN CALIBRATION SERVICES LLP





Site: www.nagman.com

ULR-CC254823000007489F

Certificate Number: CFC2023-221-FS/7

#### **CALIBRATION DATA**

Fluid Flow: Flow Measuring Devices

Test Reading (UUC) (Mean)	Standard Reading	Error	Expanded Uncertainty ±	Coverage Factor
m³/hr	m³/hr	%	(%)	k
232.98	232.19	0.34	1.20	2.00
319.64	318.72	0.29	1.20	2.00

#### Note:

- 1. % Error = Test Reading Standard Reading / Standard Reading \*100
- 2. No deviation or exclusion from the calibration method.

Checked By	Authorised Signatory
P.Raju	D.Arun
Team Member	Team Leader
	Page 02 of 0
	End of the Report

#18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: Lof?

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/014/280623

Report Date: 02/07/2023

Address of the Client

: Unit-H Mondipalli Village

Manaparai Taluk Trichy

Sample Description

WATER

Sample Mark

: Ground Water-Varsha Nagar Porunthalur Village

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

-28/06/2023 Sampling/received Date : 27/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)	-	7.74	1S 3025 (Part - 11):2022
2	Potassium		11.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4);2021
4	Turbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part - 10):1984
5	Odour		Agreeable	IS 3025 (Part - 5):2018
6	Taste	-	Agreeable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	410.0	IS 3025 (Part - 21):2009
8	Calcium as Ca	mg/l	92.18	IS 3025 (Part - 40):1991
9	Total Alkalinity as CaCO3	mg/l	260.0	IS 3025 (Part - 23):1986
10	Chloride as Cl	mg/l	262.28	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	ing/l	43.74	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	856.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/l	93.47	IS 3025 Part 24 Sect :2022
15	Fluoride	mg/l	0.41	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	1S 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39);2021
24	Dissolved oxygen	mg/l	6.8	l'S 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	7.67	IS 3025 Part 34 Sec 3 :2021

Authorized Signatory Dr. HAJKUMAR SAMUEL

Director leaderings

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# 18, 92nd Street, Ashok Nagar,

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#### TEST REPORT

Page : 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/014/280623

Address of the Client -

: Unit-II Mondipa#i Village Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Varsha Nagar Porunthalur Village

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

-28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

Report Date: 02/07/2023

			· · · · · · · · · · · · · · · · · · ·	
S.No.	Parameters	Units	Results	Test Method
	Sodjum Absorption Ratio	-	2.78	IS 11624 - 1986
	Cyanide	ng/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021
28	Total Iron	mg/l	0.024	IS 3025 (Part - 53):2003
	Percent Sodium as Na	%	39.98	IS 3025(Pan -45) 1993

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*

Authorized Signatory

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(Chemical & Biological Testing)
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FSSAI Notified Laboratory

FSSAI Notified Laboratory
ISO 9001, 14001 & 45001 Certified.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in

#### TEST REPORT

Page: Lof 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 3 HECSL/WT/013/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipalli Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Near West Gate within Site Poduvarpatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

06/2023 -28/06/2023

Analysis Commenced On: 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)		7.58	IS 3025 (Part - 11):2022
2	Potassium		8.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Par( - 4):2021
4	Turbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part - 10):1984
5	Odour		Agreeable	IS 3025 (Pan - 5):2018
6	Tasie		Agreeable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	320.0	IS 3025 (Part - 21):2009
8	Calcium as Ca	mg/i	96.19	IS 3025 (Part - 40):1991
9	Total Alkalinity as CaCO3	mg/l	330.0	IS 3025 (Part - 23):1986
10	Chloride as Cl	nig/l	197.95	IS 3025 Part 32 :1988
Ι1	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	mg/i	19.44	IS 3025 (Patt - 46) 1994
13	Total Dissolved Solids	mg/l	807.0	IS 3025(Pact -16):1984
14	Sulphate as SO4	mg/J	85.35	IS 3025 Part 24 Sec J :2022
15	Fluoride	mg/l	0.44	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200,8;1994
18	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	1S 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	ing/f	6.7	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	8.98	IS 3025 Part 34 Sec 3 :2021

Authorizat Signatory
Of NASEUMAR SAMUEL

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Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s, Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/013/280623

Report Date: 02/07/2023

Address of the Client

: Unit-11 Mondipalfi Village Manaparai Taluk Trichy

Sample Description

: WATER

Samole Mark

: Ground Water-Near West Gate within Site Poduvarpatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

-28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio	-	2.38	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021
28	Total Iron	mg/l	0.029	IS 3025 (Part - 53):2003
29	Percent Sodium as Na	%	39.20	IS 3025(Pan -45) 1993

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*

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Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in CONTRACTOR SECURITY CONTRACTOR SECTION ASSESSMENT OF A SECTION OF THE SECTION OF

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#### TEST REPORT

Page: Lof 2

Name of the Client

: M/s. Tamilnado Newsprint and Paper Limited.,

Report No. : HECSL/WT/012/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipatti Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Mooka Gounder Pongudupatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

27/06/2023 -28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)		7.82	IS 3025 (Part - 11):2022
2	Potassium		21.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	1S 3025(Part - 4):2021
4	Turbictity	NTU	BLQ(LQQ:0.1)	IS 3025(Part - 10):1984
5	Odour	*	Agrecable	IS 3025 (Part - 5):2018
6	Taste	-	Agrecable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	760.0	IS 3025 (Part - 21):2009
8	Calcium as Ca	mg/l	160.32	IS 3025 (Part - 40):1991
9	Total Alkalinity as CaCO3	mg/l	240.0	IS 3025 (Part - 23):1986
10	Chloride as Cl	mg/l	450.34	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	mg/l	87.48	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	1295.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/l	149.98	IS 3025 Part 24 Sec1 :2022
15	Fluoride	ıng/l	0.51	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	reg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:(.0)	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	mg/l ///,	ARE C 6.5	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/1 // 37/	\0.00\frac{1}{2}	IS 3025 Part 34 Sec 3 :2021

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Or BANIBIAN SAMUEL Districtor Technical

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#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/012/280623

Address of the Client

: Unit-II Mondipalli Village

Manaparai Taluk Trichy

Sample Description

WATER

Sample Mark

: Ground Water-Mooka Gounder Pongudupatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

27/06/2023 -28/06/2023

Analysis Commenced On: 28/06/2023

Completed On: 02/07/2023

Report Date: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio	-	3.57	1S 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 (2021
28	Total Iron	nıg/l	0.034	15 3025 (Part - 53):2003
	Percent Sodium as Na	%	18.58	IS 3025(Part -45) 1993

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*

Authorized Signatory

Dr. BANKEMAR SAMUEL Dicaches Services

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#### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/010/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipalfi Village Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Ramanaiker Pongudipatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd., Sampling/received Date : 27/06/2023 -28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)		8.17	IS 3025 (Part - 11):2022
2	Potassium		30.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
4	Turbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part - 10):1984
5	Odour	-	Agreeable	IS 3025 (Part - 5):2018
6	Taste	-	Agreeable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	450.0	IS 3025 (Part - 21):2009
8	Calcium as Ca	mg/l	108.21	IS 3025 (Part - 40):1991
9.	Total Alkalinity as CaCO3	mg/l	140.0	IS 3025 (Part - 23):1986
10	Chloride as Cl	mg/l	697.78	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/f	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	mg/l	43.74	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	1581.0	IS 3025(Part -16):1984
14	Sulphate as SO4	nig/l	203.78	IS 3025 Part 24 Sec 1:2022
15	Fluoride	mg/l	0.53	1S 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/i	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	mg/l	6.6	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	1.63	IS 3025 Part 34 Sec 3 :2021



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#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/010/280623

: Unit-II Mondipatii Village

Report Date: 02/07/2023

Address of the Client

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Ramanaiker Pongudipatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

06/2023 -28/06/2023

Analysis Commenced On: 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio	,	7,15	IS 11624 - 1986
27	Cyanide	mig/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021
28	Total Iron	mg/l	0.038	1\$ 3025 (Part - 53):2003
29	Percent Sodium as Na	%	60.80	IS 3025(Pan -45) 1993

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l- Milligrams per litre, NA -Not Applicable.

""End of Report""



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Dr. 2018/1898 SAMUEL

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#### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. - HECS1/WT/608/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipaffi Village

Manaparai Taluk Trichy

Sample Description

Sample Mark

; Ground Water-Malayalaga Gounder Malaimadaipatti Periyapatti North Village

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023 -28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
<u> </u>	рН (at 25 °C)	÷.	7.66	IS 3025 (Part - 11):2022
2	Potassium		24.0	APHA 23rd edition (Method 3500K B):201
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	1\$ 3025(Part - 4):2021
4	Turbidity	UTN	0.7	IS 3025(Part - 10):1984
5	Odom.	*	Agreeable	IS 3025 (Part - 5):2018
6	Taste		Agreeable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	0.088	IS 3025 (Part - 21):2009
8	Calcium as Ca	nog/)	228.45	IS 3025 (Part - 40):1991
y.	Total Alkalinity as CaCO3	mg/l	360.0	IS 3025 (Part - 23);1986
10	Chloride as Cl	nig/i	514.67	IS 3025 Part 32 :1988
U	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	mg/l	75.33	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	1817.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/l	515.32	IS 3025 Part 24 Sec1 :2022
15	Fluoride	mg/I	0.51	IS 3025 (Part - G0):2008
16	Phenolic compounds as C6H5OH	nıg/l	BLQ(LOQ:0.001)	APIIA 23rd edition (Method 5530C); 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8;1994
18	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	2.0	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	nıg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Port - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	mg/l	6.5	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	6.03	IS 3025 Part 34 Sec 3 :2021

Adthorized Signatory

or rajkiikkii samuel Director Technical

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#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. | HECSL/WT/008/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipæli Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Malayalaga Gounder Malaimadaipatti Periyapatti North Village

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

7/06/2023 -28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio	-	3.8	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021
28	Total Iron	mg/l	0.083	IS 3025 (Part - 53):2003
29	Percent Sodium as Na	%	38.09	1S 3025(Part -45) 1993

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

ing/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*

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Or HAJRUMAR SANTEL Oirector Technical

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#### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. | HECSL/WT/009/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipatti Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-M. Kandhasamy Pongudipatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 27/06/2023

Analysis Commenced On : 28/06/2023

-28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
ı	pH (at 25 °C)		7.91	IS 3025 (Part - 11):2022
2	Potassium		11.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
4	Turbidity	NTU	1.2	IS 3025(Paπ - 10):1984
5	Odour	•	Agreeable	JS 3025 (Part - 5);2018
6	Taste	-	Agreeable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	320.0	I\$ 3025 (Part - 21):2009
8	Calcium as Ca	mg/l	72.14	IS 3025 (Part - 40):1991
9	Total Alkalinity as CaCO3	mg/l	400.0	15 3025 (Part - 23):1986
10	Chloride as Cl	mg/l	257.33	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Mognesium as Mg	mg/I	34,02	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	1027.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/l	96.66	1S 3025 Part 24 Sec 1 :2022
15	Fluoride	mg/l	0,45	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C); 2017
17	Chromium as Cr	nag/l	BLQ(LOQ:0,01)	USEPA Method 200.8:1994
18	Arsenic as As	prig/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LQQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	3.0	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Greasc	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	mg/l	6.7	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	nig/l	4.35	15 3025 Part 34 Sec 3 :2021

Authorized Signatory

Dr. RAJKUMAR SAMUEL

Director Technical

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#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/009/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipatti Village Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

; Ground Water-M. Kandhasamy Pongudipatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

-28/06/2023

Analysis Commenced On: 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio		3.15	JS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021
28	Total Iron	เมลิ\เ	0.093	IS 3025 (Part - 53):2003
29	Percent Sodium as Na	%	45.57	IS 3025(Part -45) 1993

Note :- BLQ - Below the Limit of Quantification, LOQ-Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*



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#### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/015/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipatti Village Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Sreenivasan Ponnampatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

/06/2023 -28/06/2023

Analysis Commenced On: 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)	-	7.52	18 3025 (Part - 11):2022
2	Potassium		7.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
4	Turbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part - 10):1984
5	Odour	-	Agreeable	IS 3025 (Part - 5):2018
6	Taste	,	Agrecable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	510,0	IS 3025 (Part - 21):2009
8	Calcium as Ca	mg/f	124.25	IS 3025 (Part - 40):1991
9	Total Alkalinity as CaCO3	mg/l	290.0	IS 3025 (Part - 23):1986
10	Chloride as Cl	nıg/i	158.36	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	mg/l	48.6	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	704,0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/i	59.95	18 3025 Part 24 Sec 1 :2022
15	Fluoride	mg/l	0.39	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd culition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8;1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8;1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1,0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/I	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	nig/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	mg/I	6.6	IS 3025 (Part - 38):1989
<b>2</b> 5	Nitrate Nitrogen	mg/i	7.83	IS 3025 Part 34 Sec 3 :2021



Authorized Signatory
Dr. HAJKUMAR SAMUEL
Diesslor Tochnical

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Chennal - 600 083.

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#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/015/280623

Address of the Client

: Unit-II Mondipa<del>ll</del>i Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Sreenivasan Ponnampatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

-28/06/2023 : 27/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

Report Date: 02/07/2023

A CONTRACT OF THE PROPERTY OF					
S.No.	Parameters	Units	Results	Test Method	
			1,54	IS 11624 - 1986	
26	Sodium Absorption Ratio		BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021	
27	Cyanide	nig/i	2-w w. pp	IS 3025 (Part - 53):2003	
28	Total Iron	mg/l	0.026		
20	Person Sedium as Na	%	31.51	IS 3025(Part -45) 1993	

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*



sumorized Signatory BAIKUMAR SAMUEL Circolor Tachnical

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Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

## TEST REPORT

Page: f of 2

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/016/280623

Address of the Client

: Unit-II Mondipalli Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Arumugam Gounder Poduvarpatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

-28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

Report Date: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)		7.18	IS 3025 (Part - 11):2022
	Potassium		8.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
4	Turbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part - 10):1984
<u>`</u>	Odour		Agreeable	1S 3025 (Part - 5):2018
	Taste		Agreeable	1S 3025 (Part - 8):1984
7	Total Hardness as CaCO3	nig/l	650.0	IS 3025 (Part - 21):2009
8	Calcium as Ca	mg/l	208.41	1S 3025 (Part - 40): 1991
9	Total Alkalinity as CaCO3	mg/l	190.0	1\$ 3025 (Part - 23):1986
10	Chloride as CI	my/l	163.31	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	ing/l	31.59	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	nig/(	1159.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/l	532.41	IS 3025 Part 24 Sect :2022
15	Fluoride	nıg/i	0.48	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	B1.Q(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	mg/l	BLQ(LOQ:0,005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	mg/l	6.5	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	1.34	IS 3025 Part 34 Sec 3 :2021

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DE BARKÊMA**R SAMUEL** 

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## TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/016/280623

Report Date: 02/07/2023

Address of the Client

: Unit-Il Mondipalli Village

Sample Description

Manaparai Taluk Trichy

: WATER

Sample Mark

: Ground Water-Arumugam Gounder Poduvarpatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

-28/06/2023 Sampling/received Date : 27/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio		1.45	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021
28	Total Iron	ıng/l	0.041	IS 3025 (Part - 53):2003
29	Percent Sodium as Na	%	21.05	IS 3025(Part -45) 1993

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit, mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*

Authorized Signatory

Combicolan samuel Wiresier Technical

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Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

## TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. THECSL/WT/017/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipalli Village Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Navaladiyar Shed : Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By

-28/06/2023 Sampling/received Date : 27/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
j	pH (at 25 °C)	-	7,62	IS 3025 (Part - 11):2022
2	Potassium	mg/l	12.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:i.0)	IS 3025(Part - 4):2021
4	Turbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part - 10):1984
5	Odour	*	Agreeable	IS 3025 (Part - 5):2018
6	Taste	-	Agrecable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	560.0	IS 3025 (Part - 21):2009
8	Calcium as Ca	mg/i	196.39	IS 3025 (Part - 40):1991
9	Total Alkalinity as CaCO3	mg/l	240.0	IS 3025 (Part - 23):1986
10	Chloride as Cl	mg/i	277.13	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26);2021
12	Magnesium us Mg	mg/I	17.01	15 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	869.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/l	87.98	IS 3025 Part 24 Sec1 :2022
15	Fluoride	mg/l	0.44	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	лдЛ	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	ing/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Метсигу ав Нд	nig/J	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	nig/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	mg/l	6.7	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	7.54	JS 3025 Part 34 Sec 3 :2021

Abthorized Signatory

Dahaloakaka**kue**l Director Technical

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### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/017/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipatti Village Manaparai Taluk Trichy

Sample Description

Sample Mark

: WATER

Sample Drawn By

: Ground Water-Navaladiyar Shed : Hubert Enviro Care Systems (P) Ltd.,

-28/06/2023

Sampling/received Date : 27/06/2023 Analysis Commenced On : 28/06/2023

Completed On : 02/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio		2.57	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021
28	Total Iron	mg/i	0.032	IS 3025 (Part - 53):2003
	Percent Sodium as Na	%	34.30	IS 3025(Part -45) 1993

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*

Aufliorized Signatory

Or BASKSWER SAMUEL Director topquical

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Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in

### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamitnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/011/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipalli Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

; Ground Water-Kandhasamy Gounder Pongudipatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date
Applysis Commenced On

: 27/06/2023 -28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	l'arameters	Units	Results	Test Method
1	pli (at 25 °C)	-	7,88	IS 3025 (Part - 11):2022
2	Potassium		6.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
1	Torbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part - 10):1984
5	Odour		Agreeable	IS 3025 (Part - 5):2018
6	Taste	-	Agreeable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	> mg/l	460,0	IS 302° (Part - 21):2009
8	Calcium as Ca	mg/l	108.21	IS 3025 (Part - 40):1991
9	Total Alkalinity as CaCO3	mg/l	310.0	IS 3025 (Part - 23);1986
10	Chloride as Cl	mg/l	138.56	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	mg/l	46.17	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	657.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/t	83.94	IS 3025 Part 24 Sec1 :2022
15	Fluoride	mg/l	0.42	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200,8;1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - £7):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/I	BLQ(LOQ:4.0)	IS 3025 (Part - 39):2021
24	Dissolved oxygen	mg/l	6.7	IS 3025 (Part - 38);1989
25	Nitrate Nitrogen	mg/l	2.49	IS 3025 Part 34 Sec 3 ;2021



Abthorized Signatory

Dr. BANKUMAN SAMUEL Director Technical

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Chennai - 600 083.

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## TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. FHECSL/WT/011/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipatti Village Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Kandhasamy Gounder Pongudipatti

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

-28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method		
26	Sodium Absorption Ratio	-	1.41	IS 11624 - 1986		
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021		
28	Total Irou	mg/l	0.03	IS 3025 (Part - 53):2003		
29	Percent Sodium as Na	%	23.95 -	IS 3025(Part -45) 1993		

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*



Àūthorized Signatory

Dr. Rajkumar samuel Christie Lecheral

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Chennai - 600 083.

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ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/007/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipatti Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Rajaram Othupatti Village

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023 -28/06/2023

Analysis Commenced On: 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
l	рН (at 25 °C)		7.56	IS 3025 (Part - 11):2022
2	Potassium	mg/l	14.0	APHA 23rd edition (Method 3500K B):2017
3	Calour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
4	Turbidity	NTU	BLQ(LOQ:0.1)	1S 3025(Part - 10):1984
5	Odour	_	Agreeable	IS 3025 (Part - 5):2018
6	Taste	-	Agreeable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	510.0	IS 3025 (Part - 21):2009
8	Calcium as Ca	mg/l	140.28	IS 3025 (Part - 40);1991
9	Total Alkalinity as CaCO3	mg/l	270.0	IS 3025 (Part - 23):1986
10	Chloride as CI	mg/!	390.95	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/i	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	mg/l	38.88	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	nig/l	985.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/l	114.32	IS 3025 Part 24 Sec 1 :2022
15	Fluoride	mg/I	0.46	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	nag/l	BLQ(LOQ:0,001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 17):f984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39);2021
24	Dissolved oxygen	mg/l	ń. <b>ń</b>	IS 3025 (Part - 38):1989

Authorized Signatory

Or Bajkumah samuel Director Technical

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(Chemical & Biological Testing)

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# 18, 92nd Street, Ashok Nagar, Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/007/280623

Address of the Client

: Unit-II Mondipalli Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Rajaram Othupatti Village

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

-28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

Report Date: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
25	Nitrate Nitrogen	mg/l	9.68	IS 3025 Part 34 Sec 3 :2021
26	Sodium Absorption Ratio	-	3.74	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Sec 1 :2021
28	Total Iron	mg/l	0.046	IS 3025 (Part - 53):2003
29	Percent Sodium as Na	%	44,47	IS 3025(Part -45) 1993

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit, mg/l- Milligrams per litre, NA -Not Applicable.

""End of Report"



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#### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/018/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipatti Village

Manaparai Taluk Trichy

Sample Description

WATER

Sample Mark

: Ground Water-Shanmugam Padhiripatti WTP within Site

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

1 1 1 5

Sampling/received Date : 27/06/2023 -28/06/2023

Analysis Commenced On : 28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
1	рН (at 25 °C)	-	8.02	IS 3025 (Part -   1):2022
2	Potussium	mg/l	5.0	APHA 23rd edition (Method 3500K B):2017
3	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part 4):2021
4	Turbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part + 10):1984
5	Odour	-	Agreeable	IS 3025 (Part - 5):2018
6	Taste		Agreeable	IS 3025 (Part - 8):1984
7	Total Hardness as CaCO3	mg/l	470.0	IS 3025 (Part - 21):2009
8	Calcium as Ca	ng/l	116,23	IS 3025 (Part - 40);1991
9	Total Alkalinity as CaCO3	mg/l	360.0	IS 3025 (Part - 23):1986
10	Chloride as Cl	nıg/l	118.77	IS 3025 Part 32 :1988
11	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
12	Magnesium as Mg	mg/l	43.74	IS 3025 (Part - 46) 1994
13	Total Dissolved Solids	mg/l	645.0	IS 3025(Part -16):1984
14	Sulphate as SO4	mg/l	75.78	IS 3025 Part 24 Sec 1 :2022
15	Fluoride	mg/l	0.41	IS 3025 (Part - 60):2008
16	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
17	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
18	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
19	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200,8:1994
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	1S 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	· mg/i	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39);2021
24	Dissulved oxygen	mg/l	6.6	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	4.79	IS 3025 Part 34 Sec 3 :2021



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#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/018/280623

Report Date: 02/07/2023

Address of the Client

: Unit-II Mondipalti Village

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Ground Water-Shanmugam Pachiripatti WTP within Site

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date : 27/06/2023

7/06/2023 -28/06/2023

Analysis Commenced On : 28/06/2023

28/06/2023

Completed On: 02/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio		1.2	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 Part 27 Scc 1 :2021
28	Total Iron	mg/l	0.029	IS 3025 (Part - 53):2003
29	Percent Sodium as Na	%	20.87	IS 3025(Part -45) 1993

Note :- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit, mg/l- Milligrams per litre, NA -Not Applicable.

\*\*\*End of Report\*\*\*



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#### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/005/270623

Address of the Client

: Unit-II Mondipa#i Village Manaparai Taluk Report Date: 01/07/2023

Trichy

Sample Description

WATER

Sample Mark

Block 2 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On : 01/07/2023

S.No.	Parameters	Units	Results	Test Method
ŀ	pH (at 25 °C)	<u> </u>	8.24	IS 3025 (Part - 11):2022
2	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
3	Turbidity	NTU	0.5	IS 3025(Part - 10):1984
4	Odour	-	Agrceable	IS 3025 (Part - 5):2018
5	Taste	-	Agreeable	IS 3025 (Part - 8):1984
6	Total Hardness as CaCO3	mg/l	320.0	IS 3025 (Part - 21):2009
7	Calcium as Ca	mg/l	80.16	IS 3025 (Part - 40):1991
8	Total Alkalinity as CaCO3	mg/l	160.0	IS 3025 (Part - 23):1986
9	Chloride as Cl	mg/l	113.82	4500 Cl B APHA 23rd Edn: 2017
10	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
Ιl	Magnesium as Mg	mg/l	29.16	IS 3025 (Part - 46) 1994
12	Total Dissolved Solids	mg/l	482.0	iS 3025(Part -16):1984
13	Sulphate as SO4	mg/l	77.07	IS 3025(Part - 24)Sec 1:2022
14	Fluoride	mg/l	0.35	IS 3025 (Part - 60):2008
15	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
16	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
17	Arsenic as As	mg/i	BLQ(LOQ:0,005)	USEPA Method 200.8:1994
18	Mercury as Hg	mg/l	0.060	USEPA Method 200.8:1994
19	Percent Sodium as Na	%	26.49	IS 3025(Part -45) 1993
20	Total suspended solid	n\g/l	BLQ(LOQ:1.0)	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/i	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):199[
24	Dissolved oxygen	mg/l	6.3	IS 3025 (Part - 38):1989
25 ]	Nitrate Nitrogen	mg/l	1.12	IS 3025(Part - 34)Sec 3:2021



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SIVAPRAKASAM, IV Lab Manager

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## TEST REPORT

Page: 2 of 2

Name of the Client

. M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/005/270623

Address of the Client

: Unit-II Mondipalli Village

Report Date: 01/07/2023

Manaparai Taluk

Trichy WATER

Sample Description

: Block 2 - Piezometer Water

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

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Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio	-	1.66	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 (Part-27):1986
28	Total Iron	mg/l	0.04	1S 3025 (Part - 53):2003

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTII- Nephelometric Turbidity Unit,

mg/l - Milligrams per liter.

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SIVAPRAKASAM, M Lab Manager

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## TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/006/270623

Address of the Client

: Unit-II Mondipalli Village

Report Date: 01/07/2023

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Block 4 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On: 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
ŀ	plf (at 25 °C)		8.27	IS 3025 (Part - 11):2022
2	Colour	Hazen Unit	BLQ(LOQ:1.0)	1S 3025(Part - 4):2021
3	Turbidity	NTU	BLQ(LOQ:0.1)	IS 3025(Part - 10):1984
4	Odour	-	Agreeable	IS 3025 (Part - 5):2018
5	Taste	-	Agreeable	IS 3025 (Part - 8):1984
6	Total Hardness as CaCOJ	mg/l	300.0	IS 3025 (Part - 21):2009
7	Calcium as Ca	mg/l	56.11	IS 3025 (Part - 40):1991
8	Total Alkalinity as CaCO3	mg/l	190.0	IS 3025 (Part - 23):1986
9	Chloride as Cl	mg/l	138.56	4500 CI D APHA 23rd Edn. 2017
10	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
11	Magnesium as Mg	mg/l	38.89	IS 3025 (Part - 46) 1994
12	Total Dissolved Solids	mg/l	537.0	IS 3025(Part -16):1984
13	Sulphate as SO4	mg/l	89.41	IS 3025(Part - 24)Sec 1:2022
14	Fluoride	mg/l	0.33	IS 3025 (Part - 60):2008
15	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
16	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
17	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200,8:1994
18	Mercury as Hg	mg/l	0.0051	USEPA Method 200.8:1994
19	Percent Sodium as Na	%	31.73	IS 3025(Part -45) 1993
20	Total suspended solid	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):1991
24	Dissolved oxygen	mg/l	6.5	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	1.34	IS 3025(Part = 34)Sec 3:2021
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Authorized Signatory

SIVAPIAKASAM, IVI Lab Manager

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## TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/006/270623

Address of the Client

: Unit-II Mondipalli Village

Report Date: 01/07/2023

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Block 4 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On : 01/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio		1.65	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 (Part-27):1986
28	Total Iron	mg/l	BLQ(LOQ:0.02)	IS 3025 (Part - 53):2003

Note: BLQ - Below the Limit of Quantification, LOQ-Limit of Quantification, NTU-Nephelometric Turbidity Unit,

mg/l - Milligrams per liter.

\*\*\*End of Report\*\*\*



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SIVAPRAKASAM. M Lab Manager

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## TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 4 HECSL/WT/007/270623

Address of the Client

: Unit-II Mondipaffi Village

Report Date: 01/07/2023

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Block 6 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On : 01/07/2023

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)	-	8.07	IS 3025 (Part - L1):2022
2	Colour	Hazen Unit	BLQ(LOQ:1.0)	1S 3025(Part - 4):2021
3	Turbidity	NTU	7.9	15 3025(Part - 10):1984
4	Odout	-	Agreeable	IS 3025 (Part - 5):2018
5	Taste	_	Disagreeable	IS 3025 (Part - 8):1984
6	Total Hardness as CaCO3	mg/l	820.0	iS 3025 (Part - 21):2009
7	Calcium as Ca	mg/l	184.36	IS 3025 (Part - 40):1991
8	Total Alkalinity as CaCO3	mg/l	260.0	IS 3025 (Part - 23):1986
9	Chloride as Cl	mg/l	821.5	4500 Ci B APHA 23rd Edn: 2017
10	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
11	Magnesium as Mg	mg/l	87.48	IS 3025 (Part - 46) 1994
12	Total Dissolved Solids	mg/l	2439.0	IS 3025(Pan +16):1984
13	Sulphate as SO4	nıg/l	681.10	IS 3025(Part - 24)Sec 1:2022
14	Fluoride	nıg/l	0.47	IS 3025 (Part - 60):2008
15	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
16	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
17	Arsenic as As	mg/l	BLQ(LOQ:0,005)	USEPA Method 200.8;1994
18	Mercury as Hg	mg/l	0.001	USEPA Method 200,8:1994
19	Percent Sodium as Na	%	49.90	IS 3025(Part -45) [993
20	Total suspended solid	mg/l	18.0	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	2.0	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	16.0	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):1991
24	Dissolved oxygen	mg/l	6.2	1§ 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	1.27	IS 3025(Part - 34)Sec 3:2021
, <u> </u>		<b></b>		w4



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SIVAPRAKASAM. IV Lab Manager

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## Hubert Enviro Caro Systems (f) Lie

#18, 92nd Street, Ashok Nagar, Chennal - 600 083.

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#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/007/270623

Address of the Client

: Unit-II Mondipatti Village

Report Date: 01/07/2023

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Block 6 - Piezometer Water

Sample Drawn By

: Hubert Enviro Carc Systems (P) Ltd

Sampling/received Date : 27/06/2023

-27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio	-	5.96	IS 11624 - 1986
27	Cyanìde	mg/l	BLQ(LOQ:0.01)	IS 3025 (Part-27):1986
28	Total Iron	mg/l	0.43	18 3025 (Part - 53):2003

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l - Milligrams per liter.

\*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPRAKASAM. N Lab Manager

Actor Carlos Care Systems (P) Ltd.

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Chennal - 600 083.

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## TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/008/270623

Address of the Client

: Unit-II Mondipatti Village

Report Date: 01/07/2023

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Block 7 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
]	pH (at 25 °C)		8.31	IS 3025 (Part - 11):2022
2	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
3	Turbidity	บาน	75.6	IS 3025(Pert - 10):1984
4	Odour	*	Agreeable	IS 3025 (Part - 5):2018
5	Taste	-	Disagreeable	IS 3025 (Part - 8):1984
6	Total Hardness as CaCO3	mg/l	400.0	IS 3025 (Part - 21):2009
7	Calcium as Ca	nıg/l	80.16	IS 3025 (Part - 40):1991
8	Total Alkalinity as CaCO3	mg/l	190.0	IS 3025 (Part - 23):1986
9	Chloride as Cl	nig/l	173.20	4500 C1 B APHA 23rd Edn; 2017
10	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
11	Magnesium as Mg	mg/l	48.6	IS 3025 (Part - 46) 1994
12	Total Dissolved Solids	mg/l	637.0	IS 3025(Part -16):1984
13	Sulphate as SO4	mg/l	104.52	IS 3025(Part - 24)Sec 1:2022
14	Fluoride	mg/l	0.36	IS 3025 (Part - 60):2008
15	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C); 2017
16	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
17	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
18	Mercury as Hg	mg/l	0.0007	USEPA Method 200.8;1994
19	Percent Sodium as Na	%	30.53%	IS 3025(Part -45) 1993
20	Total suspended solid	mg/l	173.0	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	3.0	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	24.0	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/i	BLQ(LOQ:4.0)	IS 3025 (Part - 39):1991
24	Dissolved oxygen	mg/l	6.0	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	1.24	1S 3025(Part - 34)Sec 3:2021



Authorized Signatory

SIVAPRAKASAM. W Lab Manager

# Hobset Laving Core Systems (2) List.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Lahoratory Service - Englisher

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAl Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/008/270623

Address of the Client

: Unit-II Mondipatti Village

Report Date: 01/07/2023

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Block 7 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio	-	1.79	IS 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 (Part-27):1986
28	Total Iron	mg/l	2.59	IS 3025 (Part - 53):2003

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l - Milligrams per liter.

\*\*\*End of Report\*\*\*



**Authorized Signatory** 

SIVAPRAICASAWI. 101

Lab Manager

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested.

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#### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No : HECSL/WT/009/270623

Address of the Client

: Unit-II Mondipatti Village

Report Date: 01/07/2023

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Block 9 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On: 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
ĵ	pH (at 25 °C)	-	8.49	IS 3025 (Part - 11):2022
2	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
3	Turbidity	NTU	4.5	IS 3025(Part - 10):1984
4	Odour	-	Agreeable	IS 3025 (Part - 5):2018
5	Taste	-	Disagrecable	IS 3025 (Part - 8):1984
6	Total Hardness as CaCO3	mg/l	330.0	1S 3025 (Part - 21):2009
7	Calcium as Ca	mg/l	68.13	1S 3025 (Part - 40):1991
8	Total Alkalinity as CaCO3	mg/l	200.0	IS 3025 (Part - 23):1986
9	Chloride as CI	mg/l	178.15	4500 CI B APHA 23rd Edn; 2017
10	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
11	Magnesium as Mg	mg/l	38.89	IS 3025 (Part - 46) 1994
12	Total Dissolved Solids	mg/l	716.0	IS 3025(Part -16):1984
13	Sulphate as SO4	mg/l	186.49	IS 3025(Part - 24)Sec 1:2022
14	Fluoride	mg/l	0.36	IS 3025 (Part - 60):2008
15	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C); 2017
16	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200,8;1994
17	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200.8:1994
18	Мегсигу аз Нд	mg/l	0.001	USEPA Method 200,8:1994
19	Percent Sodium as Na	%	35.21	IS 3025(Part -45) 1993
20	Total suspended solid	mg/l	10.0	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	BLQ(LOQ:1.0)	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):1991
24	Dissolved oxygen	mg/l	6.2	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	1,25	IS 3025(Part - 34)Sec 3:2021

Anthorized Signatory

SIVAPRAMSANI. M lab Manager

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## Subort Englis Core Sections (F) And.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAI** Notified Laboratory ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited.,

Report No : HECSL/WT/009/270623

Address of the Client

: Unit-II Mondipallt Village

Report Date: 01/07/2023

Manaparai Taluk Trichy

Sample Description

: WATER

Sample Mark

: Block 9 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 ~27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
	Sodium Absorption Ratio		2.03	IS 11624 - 1986
27	Cyanide	nìg/l	BLQ(LOQ:0.01)	IS 3025 (Part-27):1986
28	Total fron	mg/l	0.13	IS 3025 (Part - 53);2003

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l - Milligrams per liter.

\*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPRAKASANI. M

Lab Manager

# Philosof Lavier Liera Systems (P) Ltd.

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in - Barbara da anno Sormiones Birristara

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## TEST REPORT

Page: 1 of 2

Name of the Client

1 M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/010/270623

Address of the Client

🗉 Unit-H Mondipatti Village

Report Date: 01/07/2023

Manaparai Taluk

Trichy

WATER

Sample Description

: Block 10 - Piczometer Water

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

4510712022

Completed On : 01/07/2023

S.No.	Parameters	Units	Results	Test Method
1	pH (at 25 °C)	-	8.31	1S 3025 (Part - 11):2022
2	Colour	Hazen Unit	BLQ(LOQ:1.0)	IS 3025(Part - 4):2021
3	Turbidity	NTU	17.5	IS 3025(Part - 10):1984
4	Odour	-	Agreeable	IS 3025 (Part - 5):2018
5	Taste		Disagrecable	IS 3025 (Pan - 8):1984
6	Total Hardness as CaCO3	mg/l	370.0	IS 3025 (Part - 21):2009
7	Calcium as Ca	mg/l	71.14	1\$ 3025 (Part - 40): 1991
8	Total Alkalinity as CaCO3	mg/l	160.0	IS 3025 (Part - 23):1986
9	Chloride as Cl	mg/l	287.03	4500 CI B APHA 23rd Edn: 2017
10	Residual free Chlorine	mg/i	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
11	Magnesium as Mg	mg/l	46.17	IS 3025 (Part - 46) 1994
12	Total Dissolved Solids	mg/l	935.0	IS 3025(Part -16):1984
13	Sulphate as SO4	mg/l	238.68	IS 3025(Part - 24)Sec 1:2022
14	Fluoride	mg/l	0.41	1\$ 3025 (Part - 60):2008
15	Phenolic compounds as C6H5OH	mg/l	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C): 2017
16	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
17	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Method 200,8:1994
18	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200,8(1994
19	Percent Sodium as Na	%	43.48	IS 3025(Part -45) 1993
20	Total suspended solid	mg/l	40.0	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	3.0	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	20.0	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/l	BLQ(LOQ:4.0)	IS 3025 (Part - 39):1991
24	Dissolved oxygen	mg/l	5.9	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	1.09	IS 3025(Part - 34)Sec 3:2021



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SIVAPRAKABAN, 68
Lab Manages

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# Mobert Proton Care Systems (M) Ltd.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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### TEST REPORT

Page: 2 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 11ECSL/WT/010/270623

Address of the Client

: Unit-II Mondipalli Village

Report Date: 01/07/2023

Manaparai Taluk

Trichy

Sample Description

: WATER : Block 10 - Piezometer Water

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
	Sodium Absorption Ratio		3.06	IS 11 <b>624 -</b> 1986
27	Cyanide	nig/l	BLQ(LOQ:0.01)	IS 3025 (Part-27):1986
28	Total Iron	mg/l	0.280	IS 3025 (Part - 53);2003

Note: BLQ - Below the Limit of Quantification, LOQ-Limit of Quantification, NTU-Nephelometric Turbidity Unit, mg/t - Milligrams per liter.

\*\*\*End of Report\*\*\*

Authorized Signatory

SIVAPNAKASAM. M Lab Manager

# PROBER LAVIE CARO SYSTEMS (P) LYS

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in

Laboratory Sorvives thirthios

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### TEST REPORT

Page: 1 of 2

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/011/270623

Address of the Client

: Unit-II Mondipatti Village

Report Date: 01/07/2023

Manaparai Taluk

Trichy

Sample Description

: WATER

Sample Mark

; Block II - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date
Analysis Commenced On

: 27/06/2023 -27/06/2023

Analysis Commenced On: 27/06/2023

Completed On : 01/07/2023

S.No.	Parameters	Units	Results	Test Method
l	pH (at 25 °C)		8.32	IS 3025 (Part - 11):2022
2	Colour	Hazen Unit	BLQ(LOQ:1.0)	(\$ 3025(Part - 4):2021
3	Turbidity	NTU	2.2	IS 3025(Part - 10):1984
4	Odour	-	Agreeable	IS 3025 (Part - 5):2018
5	Taste		Disagreeable	IS 3025 (Part - 8):1984
6	Total Hardness as CaCO3	mg/l	420.0	IS 3025 (Part - 21):2009
7	Calcium as Ca	mg/l	88.17	IS 3025 (Part - 40):1991
8	Total Alkalinity as CaCO3	mg/l	210.0	1S 3025 (Part - 23);1986
9	Chloride as Cl	mg/l	103.92	4500 Ci B APHA 23rd Edn: 2017
10	Residual free Chlorine	mg/l	BLQ(LOQ:0.1)	IS 3025 (Part - 26):2021
11	Magnesium as Mg	mg/l	48.6	IS 3025 (Part - 46) 1994
[2	Total Dissolved Solids	mg/i	571.0	IS 3025(Part -16);1984
13	Sulphate as SO4	mg/l	106.6	18 3025(Part - 24)Sea: 1:2022
14	Fluoride	mg/l	0,33	IS 3025 (Part - 60):2008
15	Phenolic compounds as C6H5OH	ıng/i	BLQ(LOQ:0.001)	APHA 23rd edition (Method 5530C); 2017
16	Chromium as Cr	mg/l	BLQ(LOQ:0.01)	USEPA Method 200.8:1994
17	Arsenic as As	mg/l	BLQ(LOQ:0.005)	USEPA Melhod 200.8:1994
18	Mercury as Hg	mg/l	BLQ(LOQ:0.0005)	USEPA Method 200.8:1994
19	Percent Sodium as Na	mg/l	19.65%	IS 3025(Part -45) 1993
20	Total suspended solid	mg/l	5.0	IS 3025 (Part - 17):1984
21	BOD,3 days @27°C as O2	mg/l	2.0	IS 3025 (Part - 44):1993
22	Chemical oxygen demand as O2	mg/l	16.0	IS 3025 (Part - 58):2006
23	Oil and Grease	mg/i	BLQ(LOQ:4.0)	IS 3025 (Part - 39):1991
24	Dissolved oxygen	mg/l	6.2	IS 3025 (Part - 38):1989
25	Nitrate Nitrogen	mg/l	1.15	IS 3025(Part - 34)Sec 3;2021



Authorized Signatory

SIVAPRAKASAM. M Lab Manager

# Sanos kario kera Systems (P) (15.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Emberratory Scholops therebers

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## TEST REPORT

Page: 2 of 2

Name of the Client

: M/s, Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WT/011/270623

Address of the Client

: Unit-Il Mondipalli Village

Report Date: 01/07/2023

Address of the Chem

Manaparal Taluk

Trichy

Sample Description

: WATER

Sample Mark

: Block 11 - Piezometer Water

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On: 27/06/2023

27100/2022

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method
26	Sodium Absorption Ratio		1.79	1S 11624 - 1986
27	Cyanide	mg/l	BLQ(LOQ:0.01)	IS 3025 (Part-27):1986
28	Total Iron	mg/l	0.11	IS 3025 (Part - 53):2003

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, NTU- Nephelometric Turbidity Unit,

mg/l - Milligrams per liter.

""End of Report""



Authorized Signatory

SIVAPRAKASAM. M Lab Manager

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HECS/Q/FMT/50



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Water Quality Monitoring - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

With reference to compliance of special condition of Water Quality Monitoring and Preservation mentioned in reference cited above, we are submitting the following reports, for the period from Apr'23 to Sep'23

- i) Report of Analysis of Treated Effluent, Ground water and Piezometer carried out by M/s Hubert Enviro Care Systems, Chennai, a NABL accredited Laboratory.
- ii) Monthly summary report of continuous monitoring of treated effluent.

This is for your kind information and records.

Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

- CC: (1) The Member Secretary, SEIAA, 3<sup>rd</sup> Floor, Panagal Maaligal, No.1 Jeenis Road, Saidapet, Chennai 600 005.
  - (2) The Member Secretary, TNPCB, Chennai 600 032.
  - (3) Zonal Officer, Central Pollution Control Board, South Zone Office, "Nisarga Bhawan", 1 st Floor, Thimmaiah Road, 7th 'D' Main, Shivanagar, Bengaluru-560 079.
  - (4) The Joint Chief Environmental Engineer, TNPCB,25, SIDCO Industrial Estate, Thuvakudi, Trichy 15.
  - (5) The District Environmental Engineer, TNPCB,25, SIDCO Industrial Estate, Thuvakudi, Trichy 15.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

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Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC: The Member Secretary, SEIAA, 3<sup>rd</sup> Floor, Panagal Maaligal, No.1 Jeenis Road, Saidapet, Chennai - 600 005.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

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Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

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This is for your kind information and records.

Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC:

The Member Secretary, TNPCB, Chennai - 600 032.



#### TAMILNADU NEWSPRINT AND PAPERS LTD. UNIT - II

ROA/TNPL/19b

20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Water Quality Monitoring - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

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Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC:

The Zonal Office (South), Central Pollution Control Board, NisargaBhavan, Thimmaiah Road, 2nd Main Rd, Shivanagar, Bengaluru - 560 079.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Water Quality Monitoring - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

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Yours faithfully,

FOR TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A. DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC:

The Joint Chief Environmental Engineer, TNPCB, 25, SIDCO Industrial Estate, Thuvakudi, Trichy - 15.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Water Quality Monitoring - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

With reference to compliance of special condition of Water Quality Monitoring and Preservation mentioned in reference cited above, we are submitting the following reports, for the period from Apr'23 to Sep'23

- i) Report of Analysis of Treated Effluent, Ground water and Piezometer carried out by M/s Hubert Enviro Care Systems, Chennai, a NABL accredited Laboratory.
- ii) Monthly summary report of continuous monitoring of treated effluent.

This is for your kind information and records.

Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A. DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC:

The District Environmental Engineer, TNPCB, 25, SIDCO Industrial Estate, Thuvakudi, Trichy - 15.





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BIOLOGICAL ACTIVATED SLUDGE PROCESS WITH FINE BUBBLE DIFFUSERS





SECONDARY CLARIFIER



**OUTLET OF DAF SYSTEM** 



PRESSURE SAND FILTERS



SAMPLES OF RAW EFFLUENT & FINAL TREATED WATER

# Hubert Erviro Care Systems (1) Lid.

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Salamenters Previous Phisks

(Chemical & Biological Testing)
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FSSAI Notified Laboratory
ISO 9001, 14001 & 45001 Certified.

## TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/021/210423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post, Manapparni Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

Wasta Water

Sample Mark

:STP Treated- Capative Power Plant Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

:21/04/2023 -24/04/2023

Analysis Commenced On :24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
		mg/l	6.0	IS 3025 (Part 17) 1984	30
	Total suspended Solids		7.99	IS 3025 (Part 11) 2022	5.5 - 9.0
	pH @ 25°C	mg/l	2.84	IS 3025 (Part 34)1988	-
	Ammonical Nitrogen as N BOD, 3 days @ 27°C as O2	me/l	5.0	18:3025 (Part 44)1993	20
	COD as O2	mg/l	26.0	fS 3025 (Part 58) 2006	
	Total Nitrogen	mg/l	5.85	1S 3025 (Part 34)1988	

Note :- nig/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

Verified By



Authorized Signatory

SIVAPHAKASAM. M Lab Mananer

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# Milbert Enviro Care Systems (P) Ltd.

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Laboratory Services Divisions

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### TEST REPORT

Page: 1 of I

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. FHECSL/MB/001/240423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

Wacta Water

: Waste Wate

·S

:STP Treated- Capative Power Plant Area :Hubert Enviro Care Systems (P) Ltd

Sample Mark Sample Drawn By

: 21/04/2023

-24/04/2023

Sampling/received Date

Analysis Commenced On

: 24/04/2023

Completed On: 27/04/2023

S.No.		Units	Results	Test Method	Limits	
1	Faccal coliform	MPN/100ml	170	IS 1622	-	

Note :- MPN-Most Propable Number.

\*\*\*End of Report\*\*\*

Verified by



Authorized Signatory

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Baban Lucks Chr. Sychops (F) (id.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-maii : labsales@hecs.in BANGRAMORY BOOKENED BANGRAM

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/023/210423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 29/04/2023

Address of the Chen

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 21/04/2023 -24/04/2023

Analysis Commenced On

: 24/04/2023

Completed On: 29/04/2023

S.Na.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	16.0	JS 3025 (Part 17) 1984	30
2	pH @ 25°C	*	7.63	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	22.92	IS 3025 (Pan 34)1988	*
4	BOD, 3 days @ 27°C as O2	mg/l	18.0	1\$:3025 (Part 44)1993	20
5	COD as O2	mg/l	72.0	1S 3025 (Part 58) 2006	-
6	Total Nitrogen	mg/l	38.52	IS 3025 (Part 34)1988	-

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

""End of Report"

Verified By



Authorized Signatory
D. ANUSTIYA
Deputy Quality Manager

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# Hader Enviro Care Systems (F) Ltd.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Laborana v Services Division

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### TEST REPORT

Page: + of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 3 HECSL/MB/003/240423

Address of the Client

:Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

: Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

:21/04/2023 -24/04/2023

Analysis Commenced On

:21/04/2023 -24/04/2 :24/04/2023

Completed On :27/04/2023

S.No.	Parameters	Units	Results	Test Method	Limits
1	Fuecal coliform	MPN/100ml	220	IS 1622	-

Note: MPN-Most Propable Number.

""End of Report""

Verile A MA



Authorized Signatory

SIVAPRAKASAM, M

<sup>1.</sup> The report in fall or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances has accepte any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested.

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### TEST REPORT

Page: Lof 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/020/210423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Tricky (Dt)- 621306, Tamil Nadu

Report Date : 29/04/2023

Sample Description

: Waste Water

Sample Mark

; STP Treated-Pulpmill & Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

:21/04/2023 -24/04/2023

Analysis Commenced On :

: 24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
ì	Total suspended Solids	mg/l	22,0	IS 3025 (Part 17) 1984	30
2	рН @ 25°C	<del>-</del>	8.07	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	1,37	1S 3025 (Part 34)1988	-
ţ	BOD, 3 days @ 27°C as O2	rng/l	12.0	IS:3025 (Pari 44)1993	20
5	COD as O2	mg/l	46.0	18 3025 (Part 58) 2006	-
<u></u>	Total Nitrogen	mg/l	3.04	IS 3025 (Part 34)1988	-

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

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### TEST REPORT

Page: Fof L

Name of the Client

:M/s. Tamilpadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/002/240423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description
Sample Mark

: STP Treated- Pulpmill & Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 21/04/2023

-24/04/2023

Analysis Commenced On

: 24/04/2023

Completed On: 27/04/2023

8.1		Units	Results	Test Method	Limits
į	Faecal coliform	MPN/100m1	140	IS 1622	-

Note: - MPN-Most Propable Number.

\*\*\*End of Report\*\*\*





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### TEST REPORT

Page: | of L

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 1 HECSL/WW/024/210423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamii Nadu

Report Date: 29/04/2023

Sample Description

: Waste Water

Sample Mark

; STP Treated-Housing Colony Area : Hubert Enviro Care Systems (P) Ltd

Sample Drawn By Sampling/received Date

:21/04/2023 -

-24/04/2023

Analysis Commenced On

:24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	12.0,	18 3025 (Part 17) 1984	30
2	р <b>Н</b> @ 25°C	-	7.48	fS 3025 (Part 11) 2022	5,5 - 9,0
3	Anumonical Nitrogen as N	mg/l	6.84	18 3025 (Part 34)1988	*
1	BOD, 3 days @ 27°C as O2	mg/l	JO.0	JS:3025 (Part 44)1993	20
5	COD as O2	mg/l	58.0	IS 3025 (Part 58) 2006	
5	Total Nitrogen	mg/l	13.14	18 3025 (Part 34)1988	

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

Ver fied By



Authorized Signatory

SWAPRAKASAM, M

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# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/004/240423

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 29/04/2023

Manapparai Taluk, Trichy (D1)- 621306, Tamil Nadu

Sample Description

Waste Water

Sample Mark

: STP Treated-Housing Colony Area : Hubert Enviro Care Systems (P) Ltd

Sample Drawn By Sampling/received Date

:21/04/2023 -24/04/2023

Analysis Commenced On : 24/04/2023 Completed On: 27/04/2023

S.No		Units	Results	Test Method	Limits
1	Faceal coliform	MPN/100ml	110	IS 1622	

Note :- MPN-Most Propable Number.

\*\*\*End of Report\*\*\*





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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. | HECSL/WW/026/210423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamii Nadu

Report Date: 29/04/2023

Sample Description

: Waste Water

Sample Mark

: STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 21/04/2023 -24/04/2023

Analysis Commenced On

: 24/04/2023

Completed On: 29/04/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	25.0	IS 3025 (Part 17) 1984	30
2	рН @ 25°C	-	7.30	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	17.39	IS 3025 Part (34)1988	-
1	BOD, 3 days @ 27°C as O2	mg/l	18.0	IS:3025 (l'art 44)1993	20
5	COD as O2	mg/l	78.0	IS 3025 (Part 58) 2006	-
5	Total Nitrogen	mg/l	24.36	IS 3025 (Part 34)1988	•

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

Verified By

Chengan I

Authorized Signatory

AWAFRAKASAM. M Lab Manager

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HECS/Q/FMT/50

# **Hubert Enviro Cara Systems (?)** Ltd.

#18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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### TEST REPORT

Page: Lof E

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report No. : HECSL/MB/006/240423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 29/04/2023

: Waste Water

Sample Description Sample Mark

:STP Treated-Admin Block Area

: Hubert Enviro Care Systems (P) Ltd

Sample Drawn By

:21/04/2023

Sampling/received Date Analysis Commenced On

-24/04/2023 : 24/04/2023

Completed On: 27/04/2023

- [	S.No.	Parameters	Units	Results	Test Method	Limits
ľ		Faecal coliform	MPN/100ml	130	IS 1622	-

Note: - MPN-Most Propable Number.

\*\*\*End of Report\*\*\*





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HECS/C/EMT/EG HECS/Q/FMT/50

# Hubert Enviro Care Systems (P) Ltd.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/015/270323

Address of the Client

: Unit-II Mondipath Village

Report Date: 29/04/2023

Manaparai Taluk Trichy

Sample Description

: Waste Water

Sample Mark

; STP Treated-Board Machine Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

:21/04/2023 -24/04/2023

Analysis Commenced On

: 24/04/2023

Completed On: 29/04/2023

Parameters	Units	Results	Test Method	Limits*
Total suspended Solids	mg/l	12.0	IS 3025 (Part 17) 1984	30
pH @ 25℃		7.96	18 3025 (Part 11) 2022	. 5.5 - 9.0
Ammonical Nitrogen as N	mg/l	5.72	IS 3025 Part (34)1988	-
BOD, 3 days @ 27°C as O2	mg/l	14.0	18:3025 (Part 44)1993	20
COD as O2	mg/l	56.0	IS 3025 (Part 58) 2006	-
Total Nitrogen	mg/l	10.59	IS 3025 (Part 34)1988	1
	Total suspended Solids pH @ 25°C Ammonical Nítrogen as N BOD, 3 days @ 27°C as O2 COD as O2	Total suspended Solids mg/l pH @ 25°C Ammonical Nitrogen as N mg/l BOD, 3 days @ 27°C as O2 mg/l COD as O2 mg/l	Total suspended Solids mg/l 12.0 pH @ 25°C - 7.96 Ammonical Nitrogen as N mg/l 5.72 BOD, 3 days @ 27°C as O2 mg/l 14.0 COD as O2 mg/l 56.0	Total suspended Solids mg/l 12.0 IS 3025 (Part 17) 1984 pH @ 25°C - 7.96 IS 3025 (Part 11) 2022 Ammonical Nitrogen as N mg/l 5.72 IS 3025 Part (34)1988 BOD, 3 days @ 27°C as O2 mg/l 14.0 IS:3025 (Part 44)1993 COD as O2 ing/l 56.0 IS 3025 (Part 58) 2006

Note :- mg/i- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory

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HECS //DIF MY 150 HECS/Q/FMT/50

# Habari Enviro Care Systems (P) Ltd.

# 18, 92nd Street, Ashok Nagar.

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Bunderstray Surgeer Washing

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAI** Notified Laboratory ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: | of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/005/240423

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparat Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 29/04/2023

Sample Description

: Waste Water

Sample Mark

:STP Treated-Board Machine Area : Hubert Enviro Care Systems (P) Ltd

Sample Drawn By Sampling/received Date

:21/04/2023

Analysis Commenced On

-24/04/2023 :24/04/2023

Completed On: 27/04/2023

S.No.	Paranicters	Units	Results	Test Method	Limits
i :	Faecal coliform	MPN/100ml	90	IS 1622	,

Note :- MPN-Most Propable Number.

""End of Report""





<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise montloned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of lesue of test report. 4. Under no circumstances tab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar,

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Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Patiensias Sarama Division

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### TEST REPORT

Page: For L

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/015/230523

Address of the Client

: Unit-II Mondipatti Village, K. Periyapatti Post,

Report Date: 27/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

; STP Treated- Capative Power Plant Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd : 22/05/2023 -24/05/2023

Sampling/received Date
Analysis Commenced On

: 24/05/2023

Completed On :27/05/2023

S.No.	Parameters	Units	Results	Test Mcthod	Limits*
· · · · · · · · · · · · · · · · · · ·	Total suspended Solids	mg/l	3.0	IS 3025 (Part 17) 1984	100
2	pH @ 25°C	-	8.09	4500 II+B APHA 23rd Edition: 2017	5 5 - 9.0
3	Ammonical Nitrogen as N	mg/l	2.70	1S 3025 Part (34)1988	50
1	BOD, 3 days @ 27°C as O2	mg/l	4.0	IS:3025 (Part 44)1993	30
5	COD as O2	mg/l	22.0	IS 3025 (Part 58) 2006	250
5	Total Nitrogen	mg/l	5,68	IS 3025 (Part 34)1988	NΛ

Note:- BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l- Milligrams per litre.

Remarks: Outlet as above parameters meets TNPCB Standards.

""End of Report""

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D. ANUSUYA
Deputy Quality Manages

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# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Publisheday Alarbasa Diseste :

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### TEST REPORT

Page: Lof L

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. | HECSL/MB/012/260523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 27/05/2023

Sample Description

: Waste Water

Sample Mark

: STP Treated- Capative Power Plant Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On

: 24/05/2023

Completed On: 26/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
	Faecal coliform	MPN/100ml	<1.8	APIIA 24th Edition Part 9221	-

Note: - MPN-Most Propable Number.

\*\*\*End of Report\*\*\*





Authorized Signatory
D. ANUSUYA
Deputy Quality Manages

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# 18, 92nd Street, Ashok Nagar,

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### TEST REPORT

Page : Lof L

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/017/230523

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 27/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamii Nadu

Sample Description

Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On

: 24/05/2023

Completed On: 27/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	26,0	IS 3025 (Part 17) 1984	30
2	pH @ 25°C	-1	8.15	4500 H+B APHA 23rd Edition: 2017	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	23.54	IS 3025 Part (34)1988	+
i	BOD, 3 days a 27°C as O2	mg/l	16.0	IS:3025 (Part 44)1993	20
	COD as O2	mg/l	64.0	1S 3025 (Part 58) 2006	-
	Total Nitrogen	mg/l	39.48	IS 3025 (Part 34)1988	•

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

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Chennai 600 083

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### Habbit Enviro Cosa Syvieros (P) Co.

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in LANCERSON Y STREET CONTRACTOR

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/013/260523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 27/05/2023

Sample Description

Waste Water

Sample Mark

: STP Treated-Guest House Area : Hubert Enviro Care Systems (P) Ltd

Sample Drawn By Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On

: 24/05/2023

Completed On: 26/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
l	Faccal coliform	MPN/100ml	<1.8	APHA 24th Edition Part 9221	-

Note :- MPN-Most Propable Number.

\*\*\*End of Report\*\*\*

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D. ANUSUYA Deputy Quality Manages

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#18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in THE REPORT OF THE PROPERTY OF THE PARTY OF T

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. | HECSL/WW/014/230523

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 27/05/2023

Sample Description

: Waste Water

Sample Mark

; STP Treated-Pulpmill & Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 22/05/2023 -24/05/2023

Analysis Commenced On

: 24/05/2023

Completed On: 27/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	14.0	IS 3025 (Part 17) 1984	30
2	рН @ 25℃	-	8.39	IS 3025 (Part 11) 2022	5.5 - 9.0
	Ammonical Nitrogen as N	mg/l	1.25	IS 3025 (Part 34)1988	-
	BOD, 3 days @ 27°C as O2	mg/l	8.0	1S:3025 (Part 44)1993	20
	COD as O2	mg/l	32.0	IS 3025 (Part 58) 2006	
;	Total Nitrogen	mg/l	2.86	1S 3025 (Part 34)1988	

Note :- mg/l-Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

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- Charles

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D. ANUSUYA
Deputy Quality Manages

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BREST ERVED BUILD SYSTEM (1974).

# 18, 92nd Street, Ashok Nagar,

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Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in EMMERSON THE COURT BEING TO

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/011/260523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 27/05/2023

Sample Description

: Waste Water

Sample Mark

; STP Treated-Pulpmill & Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 22/05/2023 -23/05/2023

Analysis Commenced On

: 24/05/2023

Completed On: 27/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*	v
]	Paecal coliform	MPN/100ml	<1.8	APHA 24th Edition Part 9221	<u>-</u>	1

Note: - MPN-Most Propable Number.

\*\*\*End of Report\*\*\*

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Deputy Quality Manage

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Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in Ramarman harriado de la como de como d

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/018/230523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 27/05/2023

Waste Water

Sample Mark

: STP Treated-Housing Colony Area

Sample Drawn By

Sample Description

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

:22/05/2023 -24/05/2023

Analysis Commenced On : 24/05/2023

Completed On: 27/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	16.0	IS 3025 (Part 17) 1984	30
2	pH @ 25°C	-	8.11	4500 H÷B APHA 23rd Edition: 2017	5.5 - 9.0
	Ammonical Nitrogen as N	mg/l	7.20	IS 3025 Part (34)1988	*
	BOD, 3 days @ 27°C as O2	mg/l	8.0	1S:3025 (Part 44)1993	20
	COD as O2	ıng/l	44.0	IS 3025 (Part 58) 2006	
,	Total Nitrogen	mg/í	14.62	IS 3025 (Part 34)1988	

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

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Authorized New Shiry A
Deputy Quality Manager

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Habert Indus Cara Systems (f) List.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 1 HECSL/MB/014/260523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 27/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Waste Water

: 24/05/2023

Sample Mark

: STP Treated-Housing Colony Area : Hubert Enviro Care Systems (P) Ltd

Sample Drawn By Sampling/received Date

: 22/05/2023 -24/0

Analysis Commenced On

23 -24/05/2023

Completed On: 26/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*	]
1	Faccal coliform	MPN/100ml	<1.8	APHA 24th Edition Part 9221	· · · · · · · · · · · · · · · · · · ·	

Note: MPN-Most Propable Number.

\*\*\*End of Report\*\*\*

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D. ANUSUYA

Deputy Quality Manages

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HECS/Q/FMT/50

who because and a supplemental to the # 18, 92nd Street, Ashok Nagar.

Chennai - 600 083.

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#### TEST REPORT

Page: I of I

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/020/230523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 27/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

;STP Treated-Admin Block Area

Sample Drawn By Sampling/received Date

Analysis Commenced On

: Hubert Enviro Care Systems (P) Ltd -24/05/2023

: 22/05/2023

: 24/05/2023

Completed On: 27/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	24.6	1S 3025 (Part 17) 1984	30
2	pH @ 25°C		8.04	4500 H+B APHA 23rd Edition: 2017	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	7.64	IS 3025 Part (34)1988	-
4	BOD, 3 days @ 27°C as O2	mg/l	14.0	1S:3025 (Part 44)1993	20
5	COD as O2	mg/l	64.0	IS 3025 (Part 58) 2006	-
6	Total Nitrogen	mg/l	9.0	1S 3025 (Part 34)1988	

Note: - mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

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Mosert Levier Curs Systems (\*) 239.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Assistant Language Propertions of the State of the State

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FSSAI Notified Laboratory
ISO 9001, 14001 & 45001 Certified.

### **TEST REPORT**

Page: 1 of 1

Name of the Client

: M/s. Tamilnada Newsprint and Paper Limited.,

Report No. 4 HECSL/MB/016/260523

Address of the Client

: Unit-Il Mondipatti Village, K.Periyapatti Post,

Report Date: 27/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

: 24/05/2023

Sample Mark

: STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date
Analysis Commenced On

: 22/05/2023 -24/05/2023

Completed On 26/05/2023

S.No	. Parameters	Units	Results	Test Method	Limits*
1	Faccal coliform	MPN/100ml	<1.8	APHA 24th Edition Part 9221	-

Note :- MPN-Most Propable Number.

\*\*\*End of Report\*\*\*

Eny-

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Authorized Signatory
D. ANUSUYA
Deputy Quality Manages

<sup>1.</sup> The report in full or part shall not be used for any promotionat or publicity purpose without written coasent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of cost report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by cilents related to samples tested.

HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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### TEST REPORT

Page: Lof I

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/019/230523

Address of the Client

Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 27/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamit Nadu

Sample Description

Waste Water

Sample Mark

STP Treated-Board Machine Area Hubert Enviro Care Systems (P) Ltd

Sample Drawn By Sampling/received Date

22/05/2023 -24/05/2023

Analysis Commenced On

: 24/05/2023

Completed On :27/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
ı	Total suspended Solids	mg/l	8.0	IS 3025 (Part 17) 1984	30
2	pH @ 25℃	**************************************	9.19	4500 H+B APHA 23rd Edition: 2017	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/J	5.64	IS 3025 Part (34)1988	-
	BOD, 3 days @ 27°C as O2	nig/l	16.0	IS:3025 (Part 44)1993	20
	COD as O2	mg/l	63.0	IS 3025 (Part 58) 2006	*
, 1	Total Nitrogen	mg/l	11.26	IS 3025 (Part 34)1988	•

Note :- mg/l- Milligrams per fitre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

Verified By



Authorized Signatory D. ANUSUYA Deputy Quality Manager

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be rotained more than 15 days from the date of issue of test report. 4. Under no circumstances tab accepts any ilability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested.

HECS (O) FMT/ISO HECS/Q/FMT/50

### dishipt biddho dara Systems (P) (th.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Laboretra Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAI** Notified Laboratory ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: Lof 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited...

Report No. : HECSL/MB/015/260523

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 27/05/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

; STP Treated-Board Machine Area : Hubert Enviro Care Systems (P) Ltd

Sample Drawn By Sampling/received Date

Analysis Commenced On

-23/05/2023 : 22/05/2023

: 24/05/2023

Completed On :26/05/2023

S.No.	Parameters	Units	Results	Test Method	Limits*	President
1	Faecal coliform	MPN/100ml	<1.8	APHA 24th Edition Part 9221	*	

Note: MPN-Most Propable Number.

\*\*\*End of Report\*\*\*





Authorized Signatory

D. ANUSUYA Deputy Quality Manage.

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# Bungal Kriving Care Gyakesan (Fillis

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Edimorator Services (Neisland

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s, Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/011/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 01/07/2023

Sample Description Sample Mark

: Waste Water : STP Treated- Capative Power Plant Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On

: 27/06/2023

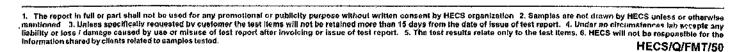
Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
	Total suspended Solids	nıg/l	2.0	IS 3025 (Part 17) 1984	30
2	pH @ 25°C	-	7.86	18 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	2.86	IS 3025 Part (34)1988	_
1	BOD, 3 days @ 27°C as O2	mg/l	3.0	1\$:3025 (Part 44)1993	20
5	COD as O2	mg/l	16.0	iS 3025 (Part 58) 2006	-
;	Total Nitrogen	nig/l	5.86	IS 3025 (Part 34)1988	-

Note: ...mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

Authorized Signatory



# index Chero Caro Syvicas (Plan.

# 18, 92nd Street, Ashok Nagar. Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Embergance of Appril 1995 (Newton)

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAl Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/010/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 30/06/2023

Sample Description

Sample Mark Sample Drawn By : Waste Water ; STP Treated- Capative Power Plant Area

Sampling/received Date

: Hubert Enviro Care Systems (P) Ltd

: 27/06/2023 -27/06/2023

Analysis Commenced On : 28/06/2023 Completed On:30/06/2023

S.No.	Parameters	Units	Results	Test Method	Limits*	
1	Faecal coliform	MPN/100ml	<1.8	APHA 24rd Edition : P-9221	-	

Note :- MPN-Most Propable Number.

""End of Report""



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<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50

# Have they be hare wistens (P) List.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Tuborajor Syrrices Division

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAI Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/09/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 01/07/2023

Sample Description

Sample Mark

: Waste Water ; STP Treated-Guest House Area

Sample Drawn By Sampling/received Date : Hubert Enviro Care Systems (P) Ltd : 27/06/2023 -27/06/2023

Analysis Commenced On

: 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method	Llmits*
1	Total suspended Solids	mg/l	22.0	IS 3025 (Part 17) 1984	30
2	pH @ 25°C		8.04	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	22.6	IS 3025 Part (34)1988	-
4	BOD, 3 days @ 27°C as O2	mg/l	17.0	IS:3025 (Part 44)1993	20
5	COD as O2	mg/l	68.0	JS 3025 (Part 58) 2006	
5	Total Nitrogen	mg/l	37.6	1S 3025 (Part 34)1988	

Note :- mg/l-Milligrams per litre, \* - Asper CTO Norms.

""End of Report""



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<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drewn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50

Smoot Enviro Care Suctores (Filth.

# 18, 92nd Street, Ashok Nagar.

Chennal - 600 083.

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Burrania and Secretary and Consideration

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. HECSL/MB/08/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 30/06/2023

Sample Description

Sample Mark

: Waste Water : STP Treated-Guest House

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

: 28/06/2023 Analysis Commenced On

Completed On :30/06/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Faecal coliform	MPN/100ml	<1.8	APHA 24rd Edition :P-9221	-

Note :- MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory

SIVAPHAKASAM Lab Manager

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# instact their Core Specims 49 Ltd.

# 18, 92nd Street; Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in Authoratory Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS FSSAI Notified Laboratory ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/012/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date : 01/07/2023

Sample Description

. . . . . .

Waste Water ; STP Treated-Pulpmill & Finishing House Area

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On

: 27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
Ī	Total suspended Solids	mg/l	12.0	IS 3025 (Part 17) 1984	30
2	pH @ 25°C	-	8.26	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/i	1.38	IS 3025 Part (34)1988	-
1	BOD, 3 days @ 27°C as O2	mg/l	9.0	1\$:3025 (Part 44)1993	20
;	COD as O2	mg/l	38.0	1\$ 3025 (Part 58) 2006	-
í	Total Nitrogen	mg/l	3.16	IS 3025 (Part 34)1988	-
			t		1

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

Chennai & 600 083 &

Authorized Signatory

# Name of Care Systems 49 Ltd.

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/011/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 30/06/2023

Sample Description

Sample Mark

Waste Water: STP Treated-Pulpmill & Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On

: 28/06/2023

Completed On: 30/06/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Faecal coliform	MPN/100ml	<1.8	APHA 24rd Edition: P-922#	

Note: - MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



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# Autor Error Date Systems (1) 114.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Kahasakory Services (Michael

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### TEST REPORT

Page: Lof 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited...

Report No. : HECSL/WW/010/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 01/07/2023

Sample Description

Sample Mark Sample Drawn By : Waste Water : STP Treated-Housing Colony Area : Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On

: 27/06/2023

Completed On:01/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	12.0	IS 3025 (Part 17) 1984	30
2	рН @ 25℃	_	8.26	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	7.28	IS 3025 Part (34)1988	
	BOD, 3 days @ 27°C as O2	mg/l	9.0	IS:3025 (Part 44)1993	20
i	COD as O2	mg/l	52.0	IS 3025 (Part 58) 2006	-
;	Total Nitrogen	mg/l	15.2	IS 3025 (Part 34)1988	

Note: - mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

Authorized Signatory

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Information shared by clients related to samples tested. HECS/Q/FMT/50

# Hobert Erviro Caro Systems (2) 1911.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAl Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/09/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 30/06/2023

Sample Description

Sample Mark

: Waste Water : STP Treated-Housing Colony

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On

: 28/06/2023

Completed On:30/06/2023

S.No	. Parameters	Units	Results	Test Method	Limits*
1	Faecal coliform	MPN/100ml	<1.8	APHA 24rd Edition : P-9221	-

Note: - MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



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SIVAPRAKASAW Lab Manage:

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of lesue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items, 6. HECS will not be reappositible for the information shared by clients related to samples tested. HECS/Q/FMT/50

### Subarc Ereko Care Systema (P) 148

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/08/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 01/07/2023

Sample Description

Sample Mark

: Waste Water : STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On

:27/06/2023

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	ing/i	26.0	IS 3025 (Part 17) 1984	30
2	рН @ 25°C	_	7.86	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	15.6	IS 3025 Part (34)1988	-
7	BOD, 3 days @ 27°C as O2	mg/l	18,0	IS:3025 (Part 44)1993	20
5	COD as O2	mg/l	76.0	IS 3025 (Part 58) 2006	-
ý Ì	Total Nitrogen	mg/l	27,2	IS 3025 (Part 34)1988	

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



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# Hubert Kerker Care Systems (P) 140.

#18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Laborate Aprilia Paris of

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/07/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamit Nadu

Report Date: 30/06/2023

Sample Description

Sample Mark

: Waste Water : STP Treated-Admin Block

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On

: 28/06/2023

Completed On: 30/06/2023

S.No.	Parameters	Units	Results	Test Method	Límits*
	Faecal coliform	MPN/100ml	<1.8	APHA 24rd Edition :P-9221	-

Note :- MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test knows will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results retate only to the test items. 6. HECS will not be responsible for the information shared by cilents related to samples tested. HECS/Q/FMT/50

Subert Enviro Care Systems (9) led.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

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### TEST REPORT

Page: 1 of I

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. HECSL/WW/07/270623

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 01/07/2023

Sample Description

Sample Mark Sample Drawn By : Waste Water : STP Treated-Board Machine Area : Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

: 27/06/2023 Analysis Commenced On

Completed On: 01/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	6.0	IS 3025 (Part 17) 1984	30
2	р <b>Н @ 25°</b> С	***************************************	8.32	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	3.62	IS 3025 Part (34)1988	-
F ]	BOD, 3 days @ 27°C as O2	mg/l	10.0	IS:3025 (Part 44)( 993	20
	COD as O2	mg/l	48.0	IS 3025 (Part 58) 2006	
j	Total Nitrogen	mg/i	8.57	IS 3025 (Part 34)1988	b

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory

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# Bullort Engine Care Bostons (8) Eld.

#18, 92nd Street, Ashok Nagar, Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

Extension Security States

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/06/270623

Address of the Client

: Unit-II Mondipatti Village, K.Perlyapatti Post,

Manapparal Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 30/06/2023

Sample Description

Sample Mark

: Waste Water : STP Treated-Board Machine

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd

Sampling/received Date

: 27/06/2023 -27/06/2023

Analysis Commenced On : 28/06/2023 Completed On:30/06/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Faecal coliform	MPN/100ml	<1.8	APHA 24rd Edition :P-9221	. SPECIAL

Note: MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested.

HECS/O/FMT/50 HECS/Q/FMT/50

# lighter Error Caro Systems (P) Life

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in



Problems was come (Notes and Alberta)

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### TEST REPORT

Page: I of 1

Name of the Client

2 M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/017/260723

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Waste Water

Sample Mark

:STP Treated-Boiler

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/07/2023 -26/07/2023

Analysis Commenced On

: 26/07/2023

Completed On:31/07/2023

ULR No.

: TC578623000006915F

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	6.0	IS 3025 (Part 17) 1984	30
2	рН @ 25℃	^	8.87	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	nig/l	8.62	IS 3025 Part (34)1988	-
4	COD as O2	mg/l	42.0	1S 3025 (Part 58) 2006	100

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



<u>JKumar Sámuel</u>

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. Re prompted and in the consent by HECS unless or otherwise mentioned. At whose specifically requested by customer the test items will not be relatined more than 15 days from the date of issue of fest report. A Under us circumstances lab accepts any liability or loss / demange caused by use or misuse of test report after invoicing or issue of test report. S. The test results related only to the rest items. 6, HECS will not be responsible for the Information shared by clients related to samples fested. HECS/Q/FMT/50

理論的人名美国马克斯 医海巴斯氏线 经自然 医化多霉菌

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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Page 18 Commence of the Commence of the Commence of

#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamiluadu Newsprint and Paper Limited.,

Report No. | HECSL/WW/017/260723N

Address of the Client

: Unit-II Mondipatti Viliage, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

: Waste Water

Sample Mark

: STP Treated-Boiler

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

-26/07/2023 : 25/07/2023

Analysis Commenced On : 26/07/2023

Completed On:31/07/2023

S.No	Parameters	Units	Results	Test Method	Limits*
1	BOD, 3 days @ 27°C as O2	mg/l	9.0	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/l	14.24	IS 3025 (Part 34)1988	15

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*

f. The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of less and items of items of less report after invalcing or issue of test report. 5. The test results relate only to the test items. 6. HitCS will not be responsible for the information shared by citants related to samples tested.

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#18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/037/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 08/08/2023

Sample Description

: Waste Water

Sample Mark

:STP Treated-Boiler

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/07/2023

Analysis Commenced On

-26/07/2023

: 27/07/2023

Completed On:30/07/2023

S.1	o. Parameters	Units	Results	Test Method	Limits
I	Feacal coliforms	MPN/100ml	130	APHA 24th Edition Part 922f	*

Note :- MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory

Or RAJKUMAR SAMUEL Director fechnical

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/015/260723

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

One-it mondeparti vinage, ica etijaparo i so

Manapparai Taluk, Trichy (Dt)- 621306, Tamii Nadu

Sample Description

Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/07/2023 -26/07/2023

Analysis Commenced On ULR No.

: 26/07/2023 : TC578623000006913F Completed On:31/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	nig/t	6.0	IS 3025 (Part 17) 1984	30
2	րH @ 25℃	~	8,77	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	0.68	IS 3025 Part (34)1988	-
4	COD as O2	mg/l	52.0	IS 3025 (Part 58) 2006	100

Note :- mg/l-Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



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Chennai - 600 083.

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/015/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

One-il (stouthhutti sinage, it. z erijapatti i osi

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

Analysis Commenced On

:26/07/2023 -26/07/2023

: 26/07/2023

Completed On:31/07/2023

S.No	. Parameters	Units	Results	Test Method	Limits*
1	BOD, 3 days @ 27°C as O2	use\]	12.0	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/i	3.93	IS 3025 (Part 34)1988	15

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory

<sup>1.</sup> The ropert in full of part shall not be used for any promotional or publicity purpose without written consent by HECS organization (2.60) helps to polyther the part shall not be used for any promotional or publicity purpose without written consent by HECS organization (2.60) helps to polyther the polyther than the consent by the part shall not be retained more than 15 days from the date of issue of feet ropert. A Uniter in officemistances his accepts any itsultity or loss i during a caused by use or minuse of test report after two clong or issue of test report. 5. The test results relate only to the test temps. B. HECS will not be responsible for the information shared by clients related to anoples testort.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. | HECSL/MB/035/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu : Waste Water

Sample Mark

:STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

:25/07/2023 -26/07/2023

Analysis Commenced On

: 27/07/2023

Completed On: 30/07/2023

ſ	S.No.		Units	Results	Test Method	Limits
ľ	1	Feacal coliforms	MPN/100ml	210	APHA 24th Edition Part 9221	

Note:-MPN-Most Propable Number.

""\*End of Report\*\*\*



Anthorized Signatory

Ur. BAJKUMAR SAWIJEL Detrois Icchaicaí

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TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/012/260723

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

: STP Treated-Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

-26/07/2023 :25/07/2023

Analysis Commenced On

:26/07/2023

Completed On:31/07/2023

ULR No.

: TC578623000006910F

S.No.	Parameters	Units	Resuits	Test Method	Limits*
1	Total suspended Solids	Ngın	BLQ(LOQ1,0)	IS 3025 (Part 17) 1984	30
2	pH @ 25℃	~	8.21	1\$ 3025 (Part 11) 2022	5.5 - 9.0
3	Animonical Nitrogen as N	mg/t	1.58	IS 3025 Part (34)1988	
4	COD as O2	mg/l	56.0	IS 3025 (Part 58) 2006	100

Note: BLQ - Below the Limit of Quantification, LOQ-Limit of Quantification, mg/l-Milligrams per litre.

\* - Asper CTO Norms.

\*"End of Report"



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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. HECSL/WW/012/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tandl Nadu : Waste Water

Sample Mark

:STP Treated-Finishing House Area

Sample Drawn By

: Hubert Enviro Carc Systems (P) Ltd.,

Sampling/received Date

-26/07/2023 : 25/07/2023

Analysis Commenced On

:26/07/2023

Completed On :31/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
ī	BOD, 3 days @ 27°C as O2	mg/l	12.0	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/l	4.72	IS 3025 (Part 34)1988	15

Note: mg/l- Milligranus per litre. \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. | HECSL/MB/032/260723N

Address of the Client

: Unit-Il Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu : Waste Water

Sample Mark

:STP Treated-Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/07/2023

:27/07/2023 Analysis Commenced On

-26/07/2023

Completed On:30/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits
1	Feacal coliforms	MPN/100ml	140	APHA 24th Edition Part 9221	-

Note:-MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory

Dr. Rajnuman Samuel

Director technical

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#### TEST REPORT

Page: Lof 1

Name of the Client

: M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/013/260723

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

: Waste Water

Sample Mark

: STP Treated-Housing Colony Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd., : 25/07/2023 -26/07/2023

Sampling/received Date
Analysis Commenced On

: 25/07/2023 : 26/07/2023

Completed On:31/07/2023

ULR No.

: TC578623000006911F

S.Ne.	Parameters	Units	Results	Test Method	Limits*
l	Total suspended Solids	mg/t	1.0	IS 3025 (Part 17) 1984	30
2	рН @ 25℃	±	8.53	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	1.26	IS 3025 Part (34)1988	•
4	COD as O2	mg/l	48.0	1S 3025 (Part 58) 2006	100

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory
Dr. RAJKUMAR SAMULL

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/013/260723N

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tanul Nadu : Waste Water

Sample Mark

: STP Treated-Housing Colony Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

-26/07/2023 : 25/07/2023

Analysis Commenced On

:26/07/2023

Completed On:31/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
1	BOD, 3 days @ 27°C as O2	mg/l	11,0	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/l	4.42	IS 3025 (Part 34)1988	15

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory Or Baikuttah Samuel

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/033/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu: Waste Water

Sample Mark

: STP Treated-Housing Colony Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/07/2023 -26/07/2023

Analysis Commenced On :

:27/07/2023

Completed On :30/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits
1	Feacal coliforms	MPN/100ml	220	APHA 24th Edition Part 9221	

Note:-MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory

Or Rajkuman Samuel

Director Inchnicat

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 3 HECSL/WW/014/260723

Address of the Client

: Unit-Il Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu : Waste Water

Sample Mark

: STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/07/2023 -26/07/2023

Analysis Commenced On

: 26/07/2023

Completed On -31/07/2023

ULR No.

: TC578623000006912F

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	12.0	IS 3025 (Part 17) 1984	30
2	рН @ 25℃	-	8.54	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	19.72	IS 3025 Part (34)1988	
4	COD as O2	mg/l	96,0	IS 3025 (Part 58) 2006	100

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

""End of Report""



Authorized Signatory Uk Bahxur àn Samuel

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Chennai - 600 083.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

1 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/014/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

ta Bijeri

; STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

-26/07/2023 : 25/07/2023

Analysis Commenced On : 26/07/2023 Completed On:31/07/2023

S.No	Parameters	Units	Results	Test Method	Limits*
1	BOD, 3 days @ 27°C as O2	mg/l	18.0	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/i	9.16	IS 3025 (Part 34)1988	15

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory AL NAINTENANTE Director Total side

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强调:据行用,一个人们有关的自己证明。 # 18, 92nd Street, Ashok Nagar,

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#### TEST REPORT

Page: I of I

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/034/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

Completed On: 30/07/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Waste Water

Sample Mark

:STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/07/2023 -26/07/2023

:27/07/2023 Analysis Commenced On

	· · · · · · · · · · · · · · · · · · ·
Test Method Lit	nits

S.No. **Parameters** Units Results Feacal coliforms MPN/100mi 110 APHA 24th Edition Part 9221

Note :- MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory ui. Rajkuman samuel Distance Technical

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#### TEST REPORT

Page: f of t

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/016/260723

Address of the Client

Report Date: 08/08/2023

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

STP Treated-Board Machine Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

:25/07/2023 -26/07/2023

Analysis Commenced On

: 26/07/2023

Completed On:31/07/2023

ULR No.

: TC578623000006914F

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	2.0	IS 3025 (Part 17) 1984	30
2	pH @ 25°C	*	8.97	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	nig/l	7.86	IS 3025 Part (34)1988	-
4	COD as O2	nıg/l	56.0	IS 3025 (Part 58) 2006	100

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



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Make The Constant Assessed 29 Lab.

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083,

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in (Chemical & Biological Testing) Recognized by MoEF, BIS FSSAI Notified Laboratory ISO 9001, 14001 & 45001 Certified.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/016/260723N

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 08/08/2023

0 15 11

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description : v

: Waste Water

Sample Mark
Sample Drawn By

: STP Treated-Board Machine Area : Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/07/2023 -26/07/2023

Analysis Commenced On :26/07/2023

Completed On:31/07/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
	BOD, 3 days @ 27°C as O2	mg/l	12.0	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/l	12.62	IS 3025 (Part 34)1988	15

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory
Dr. F. & IKUMAR SAMUEL

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Chennai - 600 083.

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#### TEST REPORT

Page: 1 of }

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/036/260723N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 08/08/2023

Sample Description

: Waste Water

Sample Mark

: STP Treated-Board Machine Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/07/2023 -26/07/2023

Analysis Commenced On

:27/97/2023

Completed On:30/07/2023

S.No.		Units	Results	Test Method	Limits
ī	Feacal coliforms	MPN/100ml	94	APHA 24th Edition Part 9221	-

Note:-MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Anthorized Signatory
Dr. RAJKHOWAN SAMUEL
Disease instances

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#### TEST REPORT

Page: 1 of 1

Name of the Client

1 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No : HECSL/WW/017/260823

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Waste Water

Sample Mark

: STP Treated-Boiler

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

-26/08/2023 : 26/08/2023

Analysis Commenced On

: 26/08/2023

Completed On 131/08/2023

ULR No.

: TC578623000012210F

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	5.0	IS 3025 (Part 17) 1984	30
2	рН @ 25°С		8.12	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/i	5.1	1S 3025 Part (34)1988	-
4	COD as O2	mg/l	58.0	IS 3025 (Part 58) 2006	100

Note :- mg/l-Milligrams per litre, \* - Asper CTO Norms.

""End of Report""



Authorized Signatory

Dr. RAJKUMAR SAMUEL Director Technical

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#### TEST REPORT

Page: I of I

Name of the Client

4 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. 3 HECSL/WW/017/260823N

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu : Waste Water

Sample Mark

STP Treated-Boiler

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/08/2023 -26/08/2023

Analysis Commenced On : 26/08/2023

Completed On:31/08/2023

S.No.	Parameters	Units	Results	Test Method	Limits*
	BOD, 3 days @ 27°C as O2	mg/l	13.0	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/l	10.54	IS 3025 (Part 34)1988	15

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory

Or, RAJKUMAH SAMUEL Director Technical

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### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/018/260823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 01/09/2023

Sample Description

: Waste Water

: 28/08/2023

Sample Mark

; STP Treated-Boiler

Sample Drawn By

: Hubert Enviro Carc Systems (P) Ltd.,

Sampling/received Date

-26/08/2023

Analysis Commenced On

: 26/08/2023

Completed On:31/08/2023

S.No.		Units	Results	Test Method	Limits
1	Feacal coliforms	MPN/100mf	130	APHA 24th Edition Part 9221	

Note :-MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory

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#### TEST REPORT

Page: I of 1

Name of the Client

3 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No : RECSL/WW/015/260823

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

:26/08/2023

-26/08/2023

Completed On:31/08/2023

Analysis Commenced On

:26/08/2023

ULR No.

: TC578623000012208F

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/t	8.0	IS 3025 (Part 17) 1984	30
2	рН @ 25°С		8.03	IS 3025 (Part 11) 2022	5.5 - 9.0
	Ammonical Nitrogen as N	mg/l	9.84	IS 3025 Part (34)1988	~
4	COD as O2	mg/l	80.0	IS 3025 (Part 58) 2006	100

Note :- mg/l-Milligrams per litre, \* - Asper CTO Norms.

""End of Report""



Authorized Signatory

DI, MILKUMAN SAMUEL Oirector Technical

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#### TEST REPORT

Page: Fof 1

Name of the Client

3 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. HECSL/WW/015/260823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

Waste Water

STP Treated-Guest House Area

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/08/2023

-26/08/2023

Analysis Commenced On

: 26/08/2023

Completed On: 31/08/2023

S.No		Units	Results	Test Method	Limits*
1	BOD, 3 days @ 27°C as O2	mg/t	20.0	i5:3025 (Part 44)1993	20
2	Total Nitrogen	n\g/l	17.8	IS 3025 (Part 34)1988	15

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



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Chennai - 600 083.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/016/260823N

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Address of the Client

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/08/2023

-26/08/2023

: 28/08/2023 Analysis Commenced On

Completed On -31/08/2023

S.No.	Parameters	Units	Results	Test Method	Limits	
1	Feacal coliforms	MPN/100ml	110	APHA 24th Edition Part 9221	-	

Note: - MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Audiorized Signatory

DI, MAJKUMAN SAMUEL Director luchnicst

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### Autori Lovin Sure Systems (P. 136)

# 18, 92nd Street, Ashok Nagar

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in ......



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#### TEST REPORT

Page: 1 of 1

Name of the Client

3 M/s. Tamiluadu Newsprint and Paper Limited.,

Report No FHECSL/WW/012/260823

Address of the Client

: Unit-H Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Waste Water

Sample Mark

: STP Treated-Finishing House Area : Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By

-26/08/2023

Sampling/received Date

: 26/08/2023

Analysis Commenced On

:26/08/2023

Completed On:31/08/2023

ULR No.

: TC578623000012205F

S.No.	Parameters	Units	Results	Test Method	Limits*
1	Total suspended Solids	mg/l	6.0	IS 3025 (Part 17) 1984	30
2	ρ <b>H @ 25°</b> C	∢	8.93	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	29.5	IS 3025 Part (34)1988	-
4	COD as O2	nıg/I	88.0	IS 3025 (Part 58) 2006	100

Note: BLQ - Below the Limit of Quantification, LOQ- Limit of Quantification, mg/l- Milligrams per litre.

\* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory

Dr. RAJKUMAR SAMUEL Director Technical

Medical Cardina Court Synthesis (19) http.

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Chennai - 600 083.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/012/260823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Waste Water

Sample Mark

: STP Treated-Finishing House Area : Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By Sampling/received Date

: 26/08/2023

-26/08/2023

Analysis Commenced On

: 26/08/2023

Completed On:31/08/2023

S.N	o. Parameters	Units	Results	Test Method	Limits*
1	BOD, 3 days @ 27°C as O2	nig/l	16	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/l	11.4	IS 3025 (Part 34)1988	15

Note :- mg/l- Milligrams per litre. \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory DI, KAJKUMAH SAMIJEL Giractor Technical

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# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/013/260823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Manapparai Taluk, Trichy (Dt)- 621306. Tamil Nadu

Sample Description

: Waste Water

Sample Mark

; STP Treated-Finishing House Area

Sample Drawn By Sampling/received Date : Hubert Enviro Care Systems (P) Ltd.,

Analysis Commenced On

: 26/08/2023 -26/08/2023

: 28/08/2023

Completed On:31/08/2023

S.No.	Parameters	Units	Results	Test Method	Limits	:
1	Feacal coliforms	MPN/100mI	140	APHA 24th Edition Part 9221	-	i

Note:-MPN-Most Propable Number,

\*\*\*End of Report\*\*\*



Authorized Signatory

OR RAJARIMAR SAMUEL Director Technical

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### Sherra Barina Baru Sykawa a Bratist

# 18, 92nd Street, Ashok Nagar

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 1 of 1

Name of the Client

1 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. + HECSL/WW/013/260823

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

: Waste Water

Sample Mark

:STP Treated-Housing Colony Area : Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By

-26/08/2023

Sampling/received Date

: 26/08/2023

Completed On:31/08/2023

Analysis Commenced On

:26/08/2023

ULR No. : TC578623000012206F

S.No.	Parameters	Units	Results	Test Method	Limits*
v	Total suspended Solids	mg/l	18.0	IS 3025 (Part 17) 1984	30
2	pH @ 25°C	-	7.11	1\$ 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	8.64	IS 3025 Part (34)1988	-
5	COD as O2	mg/l	56.0	IS 3025 (Part 58) 2006	100

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory Dr. Rajku Walt Samuel Director lucunical

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#### TEST REPORT

Page: Lof I

Name of the Client

3 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. | HECSL/WW/013/260823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Waste Water

:26/08/2023

Sample Mark

: STP Treated-Housing Colony Area : Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By Sampling/received Date

2//00/2023

-26/08/2023

Analysis Commenced On

: 26/08/2023 -26/08/20

Completed On:31/08/2023

S.No	. Parameters	Units	Results	Test Method	Limits*
1	BOD, 3 days @ 27°C as O2	nig/l	14,0	IS:3025 (Part 44)1993	20
2	Total Nitrogen	mg/l	17.1	IS 3025 (Part 34)1988	15

Note :- 10g/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



うど入<sup>り</sup> Authorized Signatory

Dr. RAJKUWAR SAMUEL
Director Technical

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# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAl Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/014/260823N

: Unit-II Mondipatti Village, K.Periyapatti Post,

Address of the Client

Manapparai Taluk, Trichy (Dt)- 621306, Tamit Nadu

Sample Description

: Waste Water

: 28/08/2023

Sample Mark

:STP Treated-Housing Colony Area : Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By Sampling/received Date

-26/08/2023 : 26/08/2023

Analysis Commenced On

Completed On:31/88/2023

Report Date: 01/09/2023

S.No.	Parameters	Units	Results	Test Method	Limits
1	Feacal coliforms	MPN/100mi	170	APHA 24th Edition Part 9221	

Note :- MPN-Most Propable Number.

""End of Report""



Anthorized Signatory

ur, hajkuman samuel Director Yochnical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samptos are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamilnado Newsprint and Paper Limited.,

Report No. : HECSL/WW/014/260823

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Waste Water

Sample Mark

: STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/08/2023 -26/08/2023

Analysis Commenced On

: 26/08/2023

Completed On:31/08/2023

ULR No.

: TC578623000012207F

S.No.	Parameters	Units	Results	Test Method	Limits*
l t	Total suspended Solids	mg/l	16.0	IS 3025 (Part 17) 1984	30
2	рН @ 25°С		8.52	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	14.0	IS 3025 Part (34)1988	-
4	COD as O2	mg/l	75.0	IS 3025 (Part 58) 2006	100

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

""End of Report""



Authorized Signatory

Dr. Kajaumah Sahuel Director Tochoicai

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HECS/Q/FMT/50

AL POP LANCE PARK CARRENCE DO LAS.

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Chennal - 600 083.

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#### TEST REPORT

Page: Lof L

Name of the Client

3 M/s. Tamiinadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/014/260823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

: Waste Water

: 26/08/2023

Sample Mark

: STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

-26/08/2023 : 26/08/2023

Analysis Commenced On

Completed On:31/08/2023

S.	No. I	'arameters	Units	Results	Test Method	Limits*
ļ	1 BOD, 3 days (	· .	mg/l	14	IS:3025 (Part 44)1993	20)
	2 Total Nitrogen		mg/l	11.7	IS 3025 (Part 34)1988	15

Note: - mg/l- Milligrams per litre, \* - Asper CTO Norus.

\*\*\*End of Report\*\*\*



Authorized Signatory

ur foodinger Samuel Director Technical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by HECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50

HARLES SHEET STANDERS FREEZE

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

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REGISERATOR GRANTING BURELONS

#### TEST REPORT

Page: Lof 1

Name of the Client

: M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/MB/015/260823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

Report Date: 01/09/2023

Sample Description

: Waste Water

Sample Mark

STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/08/2023 -26/08/2023

Analysis Commenced On :28/08/2023

Completed On: 31/08/2023

		······· · · · · · · · · · · · · · · ·	······			,
	S.No.	Parameters	Units	Results	Test Method	Limits
- 1		·				
1	i	Feacat coliforms	MPN/100ml	220	APHA 24th Edition Part 9221	

Note:-MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory
Di, Endershall Samuel
Oirestor Tachnical

### Annei Legit Cars System - An Ltd.

# 18, 92nd Street, Ashok Naga-

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in



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191 - Donald Mary and Affiliation is

#### TEST REPORT

Page: I of I

Name of the Client

: M/s. Tamilaadu Newsprint and Paper Limited.,

Report No : HECSL/WW/016/260823

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu

: Waste Water

Sample Mark Sample Drawn By : STP Treated-Board Machine Area : Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 26/08/2023

-26/08/2023

Analysis Commenced On

:26/08/2023

Completed On:31/08/2023

ULR No.

: TC578623000012209F

S.No.	Parameters	Units	Results	Test Method	Limits*
ı	Total suspended Solids	mg/l	6.0	IS 3025 (Part 17) 1984	30
2	р <b>Н @ 25</b> °C	-	8.86	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	nıg/l	10.0	IS 3025 Part (34)1988	-
4	COD as O2	mg/l	76.0	IS 3025 (Part 58) 2006	100

Note :- mg/l- Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory

DE BASTORIAN STRUCK Director Technical

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行政的政策和指挥的影響。影響的機能等於政策。

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#### TEST REPORT

Page: 1 of 1

Name of the Client

4 M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. : HECSL/WW/016/260823N

Address of the Client

: Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamit Nadu : Waste Water

•

: STP Treated-Board Machine Area

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date
Analysis Commenced On

: 26/08/2023 -26/08/2023

: 26/08/2023

Completed On 31/08/2023

	S.No.	Parameters	Units	Results	Test Method	Limits*
-	ł	BOD, 3 days @ 27°C as O2	mg/l	18	IS:3025 (Part 44)1993	20
	2	Total Nitrogen	mg/l	12.6	IS 3025 (Part 34)1988	15

Note: - mg/l-Milligrams per litre, \* - Asper CTO Norms.

\*\*\*End of Report\*\*\*



Authorized Signatory

Or, HAJRUMAR SAMUEL Director Technical

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Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : fabsales@hecs.in The Bandalog and Section Services

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#### TEST REPORT

Page: 1 of 1

Name of the Client

M/s. Tamilnadu Newsprint and Paper Limited.,

Report No. HECSL/MB/017/260823N

Address of the Client

Unit-II Mondipatti Village, K.Periyapatti Post,

Report Date: 01/09/2023

Sample Description

Manapparai Taluk, Trichy (Dt)- 621306, Tamil Nadu: Waste Water

Sample Mark

; STP Treated-Board Machine Area

Sample Drawn By Sampling/received Date : Hubert Enviro Care Systems (P) Ltd.,

Analysis Commenced On

: 26/08/2023 -26/08/2023

: 28/08/2023

Completed On: 31/08/2023

S.No		Units	Results	Test Method	Limits
1	Feacal coliforms	MPN/100ml	210	APHA 24th Edition Part 9221	

Note: - MPN-Most Propable Number.

\*\*\*End of Report\*\*\*



Authorized Signatory
Or, HAJADEAN SAMUEL
Director Technical

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HECS/Q/FMT/50

# **Hubert Enviro Care Systems (P) Ltd.**

# 18, 92nd Street, Ashok Nagar,

Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in



## Laboratory Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS FSSA Notified Laboratory ISO 9001, 14001 & 45001 Certified.

### TEST REPORT

Page: Lof 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : RECSL/WW/015/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post, Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Report Date: 04/10/2023

Sample Description

: Waste Water

Sample Mark

: STP Treated-Boiler

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -25/09/2023

Completed On:04/10/2023

Analysis Commenced On : 25/09/2023 ULR No.

: TC578623000015735F

S.No.	Parameters	Units	Results	Test Method	TNPCB
1	Total suspended Solids	mg/l	3.0	IS 3025 (Part 17) 1984	Limits*
	рН @ 25°С		8.72	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	4.2	IS 3025 Part (34)1988	7.3 - 3.0
4	COD as O2	nig/l	42.0	IS 3025 (Part 58) 2006	
ote :-	mg/l- Milligrams per litre.	<del></del>	l		50

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

Απίδοείεξα Signatory DE NAJRIEMAR SAMUEL Elrector Inshrical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unfeat or inherestic mentioned. 3. Makes specifically requested by customer the test items will not be retained more than 13 days from the office of test report. 4. Index no chromostances the accepts only liability or lace? I damage caused by the or misses of test report after invoicing or issue of test report. 5. The last results relate only to the test terms, 6. HECS will not be responsible but the intermetion shared by clients related to sumplies tested.

HECS/Q/FMT/50 HECS/Q/FMT/50

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Chennai - 600 083.

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**Laboratory Services Division** 

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAI Notified Laboratory** ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/015/250923N

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu : Waste Water

Sample Mark

: STP Treated-Boiler

: Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By Sampling/received Date

: 25/09/2023 -25/09/2023

Analysis Commenced On

: 25/09/2023

Completed On:04/10/2023

S.No.	Parameters	Units	Results	Test Method	ТМРСВ
1	BOD, 3 days @ 27°C as O2	mg/I	5.0	IS:3025 (Part 44)1993	Limits*
(	Total Nitrogen	nıg/J	8.2	IS 3025 (Part 34)1988	10

Note :- mg/i- Milligrams per litre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*

bleactor technical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publishly prepose without written consent by RECS organization. 2. Samples are not drawn by RECS unless or otherwise functioned. 3. Unless specifically requested by customer the test items will not be relatined more than 15 days from the date of issue of test report. 4. Under the circumstances isto accepts any hability or iças / damage caused by use or initiates of test report after involving or issue of test report. 5. The fact require related any to the test items. 6. IECS will not be responsible for the information shared by effects related to samples tested.

HECS/OFMT/50 HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar, Chennal - 600 083.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited,

Report No. : HECSL/MB/013/270923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

C----1- D----1

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

STP Treated-Boiler

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -27/09/2023

Analysis Commenced On

: 28/69/2023

Completed On:01/10/2023

Feacal coliforms MPM/1/0ml 20 APMA 26th Edition Do-2021	S.No.	Parameters	Units	Results	Test Method	TNPCB
	)	Feacal coliforms	MPN/100ml	70	APHA 24th Edition Part 9221	Limits* Desirable-100 Permissible-230

Note :-MPN-Most Propable Number.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: ETP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*



Authorized Signatory
We Markit WAN SAMUEL
Director Technical

<sup>1.</sup> The report in full of part shall not be used for any promotional or publicity purpose written consent by HECS organization 2. Samples are not drawn by HECS unless or eitherwise mentioned 3. Unless specifically requested by customer the test titens will not be rotatined more than 15 days from the date at lesses of test report. 4. Under no circumstances tab accepts any listellity or loss ( through consent by its or missics of text report after involving or lesses of text report. 6. The lost results relate only to the text liture. 6. HECS will not be responsible for the information whereafthy clients related to samples to significant.

HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar,

Chennal - 600 083.

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### Laboratory Services Division

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#### TEST REPORT

Page; 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/013/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

mg/l

Sampling/received Date Analysis Commenced On : 25/09/2023

: 25/09/2023

-25/09/2023

ULR No.

: TC578623000015733F

Completed On: 04/10/2023

IS 3025 (Part 58) 2006

S.No.	Parameters	Units	Results	Test Method	TNPCB
1	Total suspended Solids	mg/l	12,0	IS 3025 (Part 17) 1984	Limits*
2	pH @ 25℃		8.54	IS 3025 (Part 11) 2022	5.S - 9.0
3 1	Ammonical Nitrogen as N	mø/l	45	IS 3025 Part (34)1988	

Note :- mg/l- Milligrums per litre.

COD as O2

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*

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Authoridal Signatory DA KAJKUMAH SAMUE. Olraciae facholes!

<sup>\*</sup>Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

<sup>1.</sup> The report in tulf or part shall not the used for any premational or publicity purpose without written consent by FIECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test from with not be retained more than 15 days from the date of issue of test report. 4. Under no obcumulances lab accepts any liability or loss? I damage chused by use or insure of test report after invariging or issue of test report. 5, The test results relate only to the test items, 6. HECS will not be responsible for the information shared by clients related to samples tested. HECE/Q/FMT/50

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Laboratory Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS FSSAI Notified Laboratory ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/013/250923N

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dí) - 621 306, Tamif Nadu : Waste Water

Sample Mark

Sample Drawn By

: STP Treated-Guest House Area : Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -25/09/2023

Analysis Commenced On

: 25/09/2023

Completed On:04/10/2023

S.No.	Parameters	Units	Results	Test Method	TNPCB
1	BOD, 3 days @ 27°C as O2	mg/l	8.0	IS:3025 (Part 44)1993	Linuts*
·	Total Nitrogen	nıg/l	8.2	IS 3025 (Part 34)1988	10

ote :- mg/l- Milligrams-per litre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*

Authorized Signatory OR EXIKUMAR SAMOOL

😼 **Strecto**r Technicat

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by IECS organization. 2. Samples are not drawn by IECS unless or otherwise mentioned: 3, Unless specifically requested by execomer the test items will not be retained more than 15 days from the date of Issue of test report. 4. Under no circumstances into accepts any individually or loss? I damage caused by use or misuse of test report after invoking or issue of test report. 5. The feet results retain only to the test items. 6. HECS will not be responsible for the information shared by clients related to samples to steel. HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar, Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@lrecs.in

**Laboratory Services Division** 

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/MB/011/270923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu : Waste Water

Sample Mark

: STP Treated-Guest House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -27/09/2023

Analysis Commenced On : 28/09/2023

Completed On: 01/10/2023

	S.No.	Parameters	Units	Results	Test Method	TNPCB
-					40	Limits*
ĺ	Ī	Peacal coliforms	MPN/100m)	94	APHA 24th Edition Part 9221	Desirable-100
,			<u> </u>	· · · · · · · · · · · · · · · · · · ·		Permissible-230

Note:-MPN-Most Propable Number.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: ETP Outlet as above parameters meets TNPCB Standards.

""End of Report""

Anthorized Signatory De Briedman samuel Bleefie Technical

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1. The results relate only to the form items in the test report after invoicing or issue of lost report. 5. The results relate only to the formal terms. 6. If fact will not be responsible for the internation shared by clients related to samples tested. HECS/Q/FMT/50

# 18, 92nd Street, Ashok Nagar.

Chennai - 600 083,

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in



### **Laboratory Services Division**

(Chemical & Biological Testing) Recognized by MoEF, BIS **FSSAI Notified Laboratory** 150 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/010/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post, Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Report Date: 64/10/2023

Sample Description

Sample Mark

: STP Treated-Pulpmill & Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023

-25/09/2023

Analysis Commenced On :25/09/2023 TILD No.

Completed On: 04/10/2023

.No.	Parameters	Units	Results	Test Method	TNPCB
1	Total suspended Solids	mg/l	4.0	IS 3025 (Part 17) 1984	Limits*
4	pH @ 25℃		8.28	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/l	6.5	IS 3025 Pan (34)1988	
1	COD as O2	mg/l	46.0	IS 3025 (Part 58) 2006	50

Note :- mg/l- Milligrams per litre.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*

Aminorized Signatory OR RAJKUMAN SAMUEL Director Tochylest

<sup>\*</sup>Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

<sup>1.</sup> The report is full or part shall not be used for any premotional of publicity purpose without writted consent by HECS organization. 2. Samples are not drawn by HECS unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of just report. 4. Under no chromosprices leb accepts any informations have been excepted as a constant of the test results relate only to the test flows. 6. HECS will not be responsible for the instrumental policy stignts related to samples feeted. HECS/Q/FMT/50

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#### TEST REPORT

Page: Loft

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/010/250923N

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu : Waste Water

; STP Treated- Pulpmill & Finishing House Area

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -25/09/2023

Analysis Commenced On

: 25/09/2023

Completed On:04/10/2023

S.No.	Parameters	Units	Results	Test Method	TNPCB
1	BOD, 3 days @ 27°C as O2	mg/I	8,0	IS:3025 (Part 44)1993	Limits*
	Total Nitrogen	tng/J	9.3	1S 3025 (Part 34))988	10

Note :- mg/l- Milligrams per litre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*



Authorized Signatory Ge Rajkirdar sad.... Director Tachpical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3, thisses specifically requested by customer the test tens will not be religible into than 15 days from the date of teste of test report. 4. Under no disconstances his accepts any historination of the proposition of test report. 5. The test results religiously to the test items. 6. HECS will not be responsible for the HECS/Q/FMT/50

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Chennal - 600 083.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/MB/008/270923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

:STP Treated- Pulpmill & Finishing House Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -27/09/2023

Analysis Commenced On

: 28/09/2023

Completed On:01/10/2023

S.No.	Parameters	Units	Results	Test Method	TNPCB
ī	Feacal coliforms	MPN/100ml	170	APHA 24th Edition Part 9221	Limits* Desirable-100 Pennissible-230

Note:-MPN-Most Probable Number.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: ETP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*

Da Kajkumin sakuei Olfscier Technical

<sup>1.</sup> The report in full or part shall not be used for any promotionel or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise monitored. 3. Unless specifically requested by customer the test liems will not be relatined more than 16 days from the date of Issue of test report. 4. Under no circumstances leb accepts any liability or loss / damage caused by use or misuse of test report after invoicing or issue of test report. 5. The test results relate only to the test items, 6. HECS will not be responsible for the information shared by clients related to samples tested. HECS/Q/FMT/50

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/011/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dt) – 621 306, Tamil Nadu: Waste Water

non

: STP Treated-Housing Colony Area

Sample Mark

: Hubert Enviro Care Systems (P) Ltd...

Sample Drawn By Sampling/received Date

Wallana armona

Analysis Commenced On

: 25/09/2023 -25/09/2023

Completed On:04/10/2023

ULR No.

: 25/09/2023 : TC578623000015731F

S.No.	Parameters	Units	Results	Test Method	TNPCB
1	Total suspended Solids	mg/l	6.0	IS 3025 (Part 17) 1984	Limits*
2	pH @ 25°C	-	8.24	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	mg/i	4.4	1S 3025 Part (34)1988	*
4	COD as O2	mg/l	48.0	IS 3025 (Part 58) 2006	50

Note :- mg/l- Milligrams per litre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

""End of Report""



Authorized Signatory

12 MAR IMAR SAMUEL

Official Tachalogi

<sup>1.</sup> The report in full or part whall not be used for any promotional or publicity purpose without written concent by HECS enganization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of feat report. 4. Under no cheanslance has necepta any hability or loss? I damage entured by use or missise of test concert after involving or issue of jest report. 5. The test results relate only to the test items. 6. NECS will not be responsible for the information shared by effects of the amplies tested.

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/011/250923N

Address of the Client .

: Unit-It, Mondipatti Village, K. Periyapatti Post,

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

: STP Treated-Housing Colony Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -25/09/2023

Analysis Commenced On

: 25/09/2023

Completed On:04/10/2023

Report Date: 04/10/2023

S.No.	Parameters	Units	Results	Test Method	TNPCB
1	BOD, 3 days @ 27°C as O2	mg/l	9.0	IS:3025 (Part 44)1993	Limits <sup>4</sup>
2	Total Nitrogen	mg/i	8.80	IS 3025 (Part 34)1988	10

Note :- mg/l- Milligrams per litre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*



Disposar Technical

<sup>1.</sup> The report in full or part shell not be used for any promotional or publicity purpose without written consent by HECS organization 2. Samples are not drawn by NECS unless or otherwise mentioned 3. Unless specifically requested by customer the test items will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any informationshared by clientarelated to samples tested.

In the report in full or part shell not be used for any promotional or publicity purpose without any information shared by clientarelated to samples tested. HECS/Q/FMT/50

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/MB/009/270923

Address of the Client

: Unit-H, Mondipatti Village, K. Periyapatti Post, Manapparal Taluk, Trichy (Dt) - 621 306, Tamii Nadu

Report Date: 04/10/2023

Sample Description

Waste Water

Sample Mark

: STP Treated-Housing Colony Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -27/09/2023

Analysis Commenced On

: 28/09/2023

Completed On:01/10/2023

	Š.No.	Parameters	Units	Results	Test Melliod	TNPCB
	ŧ	Feacal coliforms	MPN/i00ml	220	APHA 24th Edition Part 9221	Limits* Desirable-100
l	Note :	MPN-Most Probable No.			<u> </u>	Permissible-230

ote :-MPN-Most Probable Number.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant,

Remarks: ETP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*



De Rajking ar samilel Olenstor Tochalest

<sup>1.</sup> The report in luft or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by customer the test items with not be retained more than 35 days from the date of issue of test report. 4. Under no circumstances lab accepts any information shared by citents related to samples tested.

### OF THE STATE OF THE CAST OF THE C HECS/Q/FMT/50

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/012/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Mark

: Waste Water

: STP Treated-Admin Block Area : Hubert Enviro Care Systems (P) Ltd.,

Sample Drawn By Sampling/received Date

: 25/09/2023

-25/09/2023

Analysis Commenced On : 25/09/2023

Completed On: 04/10/2023

ULR No.	: TC57862	3000015732F		Comprehen Oil :04/10/20	23
S.No.	Parameters	Units	Results	Test Method	TNPCB
1 Tot:	al suspended Solids	mg/i	10.0	IS 3025 (Part 17) 1984	Limits*
2 pH	@ 25°C	_	8.62	IS 3025 (Part 11) 2022	5.5 - 9.0
3 Am	monical Nitrogen as N	nig/l	6.2	IS 3025 Part (34)1988	7.5
4 COI	D as O2	nıg/l	44.0	IS 3025 (Part 58) 2006	50

Note :- mg/l- Milligrams per litre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*



Airthorizdd Signatory DR RAJELISSAN SAMUFL Ulrecter Teckpics!

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by NECS organization. 2. Samples are not drawn by NECS unless or etherwise mentioned. 3. United specifically requested by outcomer the test floors will not be retained more than 15 days from the date of issue of fast report. 4. Under no circumstances inh accepts any informationshared by place or instance of lest report effort floor than the responsible for the instances of the responsibility of the sent floors. 6. NECS will not be responsible for the HECS/Q/FMT/50

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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/012/250923N

Address of the Client

: Unit-D, Mondipatti Village, K. Periyapatti Post, Manappaval Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Report Date: 04/10/2023

Sample Description

Waste Water

Sample Mark

: STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -25/09/2023

Analysis Commenced On

: 25/09/2023

Completed On:04/10/2023

S.No.		Units	Results	Test Method	TNPCB
	BOD, 3 days @ 27°C as O2	mg/i	7.0	IS:3025 (Pan 44)1993	Limits*
·	Total Nitrogen	mg/I	7.64	IS 3025 (Part 34)1988	10

Note :- mg/l- Milligrams per lifre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

""End of Report""

Authorized Signatory Da BAJAUKAR SAMUEL Chrecher Technical

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples see not drawn by HECS unless of otherwise sentiened. 3. Unless specifically requested by customer like test flows will not be retained more than 15 days from the date of issue of test report. 4. Under no circumstances lab accepts any intermation shared by clients related to samples tested.

1. The report in full or part shall not be used for any promotional or publicity purpose without the date of issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the intermation shared by clients related to samples tested. HECS/Q/FMT/50

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Chennai - 600 083.

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Laboratory Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS FSSA! Notified Laboratory ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/MB/010/270923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Sample Description

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu : Waste Water

Sample Mark

; STP Treated-Admin Block Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd., : 25/09/2023

Sampling/received Date

-27/09/2023

Analysis Commenced On : 28/09/2023

Completed On: 01/10/2023

S.No	a and anice is	Units	Results	Test Method	TNPCB	***************************************
1		MPN/100ml	140	APHA 24th Edition Part 9221	Limits* Desirable-100	
Note	AMERICAN STATES			I	Permissible 240	ŀ

Note :-MPN-Most Propable Number.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: ETP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*



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<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or otherwise mentioned. 3. Unless specifically requested by austonier the test items will not be retained more than 15 days from the date of issue of lost report. 4. Under no circumstances his accepts any information shared by allows related to samples tested.

HECS/OFFMT/50

HECS/OFFMT/50 HECS/Q/FMT/50

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Chennai - 600 083.

Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in Laboratory Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS FSSAI Notified Laboratory ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: 1 of 1

Name of the Client

1 M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/MR/012/270923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Manapparai Tuluk, Trichy (Di) – 621 306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

:STP Treated-Board Machine Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -27/09/2023

Analysis Commenced On : 28/09/2023

Completed On:01/10/2023

Report Date: 04/10/2023

S.No.	Parameters	Units	Results	Test Method	TNPCB
1	Feacal coliforms	MPN/100ml	120	APHA 24th Edition Part 9221	Limits* Desirable-100 Permissible-230

Note:-MPN-Most Propable Number.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: ETP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*



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<sup>1.</sup> The report in full or part shall not be used to any promotional or publicity purpose without written consent by HECS organization. 2. Samples are not drawn by HECS unless or etherwise mentioned. 3. Unless specifically requested by customer the text flows will not be retained more than 15 days from the date of lesse of test report. 4. Under no chromateness that accepts any liability or loss / damage caused by use or influse of test report after involcing or lesse of test report. 5. The test results relate only to the test itoms, 6. HECS will not be responsible for the information shared by clients related to samples tested.

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Chennai - 600 083.

Ph: 42985555 Fax: 42985500 E-mail: labsales@hecs.in



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#### TEST REPORT

Page: 1 of 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/014/250923

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Report Date: 04/10/2023

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: STP Treated-Board Machine Area

Sample Mark Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023

-25/09/2023

Analysis Commenced On : 25/09/2023 ULR No. · TC578623000015724v

Completed On:04/10/2023

.No.	Parameters	Units	Results	Test Method	TNPCB
1	Total suspended Solids	mg/l	4.0	IS 3025 (Part 17) 1984	Limits*
	pH @ 25℃	w.	8.64	IS 3025 (Part 11) 2022	5.5 - 9.0
3	Ammonical Nitrogen as N	nig/l	7.5	IS 3025 Part (34)1988	3.3 - 9.0
4	COD as O2	nıg/l	40.0	IS 3025 (Part 58) 2006	50

Note: mg/l- Milligrams per litre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*

Authorized Signatory DE BAJRUWAN SAMUE Wittenter Tochalest

<sup>1.</sup> The report in full or part shall not be used for any promotional or publicity purpose without written consent by tECS organization. 2. Samples are not drawn by tECS unless or otherwise mentioned. 3. Unitess specifically requested by customer like test items will not be retained more than 15 days from the date of taxes of tage report. A: Under no circumstances lab accepts any inflamility or loss I damage caused by use or insuse of test report after involcing or issue of test report. 5. The test results relate only to the test items. 6. HECS will not be responsible for the HECS/Q/FMT/50

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Ph: 42985555 Fax : 42985500 E-mail : labsales@hecs.in

Laboratory Services Division

(Chemical & Biological Testing) Recognized by MoEF, BIS FSSAI Notified Laboratory ISO 9001, 14001 & 45001 Certified.

#### TEST REPORT

Page: Lof 1

Name of the Client

: M/s. Tamil Nadu Newsprint and Papers Limited.,

Report No. : HECSL/WW/014/250923N

Address of the Client

: Unit-II, Mondipatti Village, K. Periyapatti Post,

Manapparai Taluk, Trichy (Dt) - 621 306, Tamil Nadu

Sample Description

: Waste Water

Sample Mark

: STP Treated-Board Machine Area

Sample Drawn By

: Hubert Enviro Care Systems (P) Ltd.,

Sampling/received Date

: 25/09/2023 -25/09/2023

Analysis Commenced On

: 25/09/2023

Completed On: 04/10/2023

Report Date: 04/10/2023

S.No.	Parameters	Units	Results	Test Method	TNPCB
I	BOD, 3 days @ 27°C as O2	nıg/l	6,0	IS:3025 (Part 44)1993	Limits*
2	Total Nitrogen	mg/l	9.6	tS 3025 (Part 34)1988	10

Note :- mg/l- Milligrams per litre.

\*Mega And Metropolitan Cities As Per Standards for Sewage Treatment Plant.

Remarks: STP Outlet as above parameters meets TNPCB Standards.

\*\*\*End of Report\*\*\*

Chennai & Chenna

Authorized Signatory

DE HAJKUMAH SHALOL.

Separate Theories

<sup>1.</sup> The report in Juli or part shall not be used for any propositional or publicity purpose without written consent by HECS expanization. 2. Samples are not drawn by HECS unless or officerwise mentioned. 3. Unless specifically requested by customer the less flows will not be retained more than 15 days from the date of less report. 4. Under no excumistance that accepts any liability or loss? damage caused by use or initiage of less report after involving or issue of test report. 5. The test results relate only to the less times. 6. HECS will not be responsible for the full internation shared by clients related to camples tested.

HECS/Q/FMT/50

# **Storm Water Drain and Collection Pit**





# **Storm Water Drain and Collection Pit**



# Tyre Washing Facility at Entrance Gate , TNPL,UNIT-II





Plant is having alkali pit where all black liquor is collected at one place and pumped back to reject tank and from there it is taken to digester blow tank so there is no spillage in the plant. For bleaching we are having chlorine di oxide plant and it is used so our plant adopted with elemental free chlorine plant.



# Rain Water Harvesting Pit - UNIT - II

S.No	Location of Buildings	Qty Nos	Roof Area (Sq.M)
1	Packing materials storage godown	5	800
2	WPP Godown	17	4000
3	Wet lap godown	33	6000
4	WTP	3	200
5	Workshop	22	1800
6	Stores	22	1800
7	Boiler MCC	4	425
8	T.G Building	6	1285
9	Finishing house	14	4000
10	Board Machine #4	52	6660
11	VAM MCC	2	135
12	Compressor House	10	360
13	ESP MCC	3	215
14	Works office	5	550
15	Security office	7	125
16	"C" Godown	12	2000
17	Cement godown	12	450
	Total	229	30805



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir,

Sub: TNPL Unit -II - Air Quality Survey - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

With reference to compliance of special condition of Air Quality Monitoring and Preservation mentioned in reference cited above, we are submitting the following reports for the period from Apr'23 to Sep'23.

- i) Report of Analysis (ROA) of Air Quality Survey comprising Ambient Air Quality, Fugitive Emission, Stack Emission and Ambient Noise survey carried out through M/s Hubert Enviro Care Systems, Chennai, a NABL accredited Laboratory.
- ii) Monthly summary report of continuous monitoring of ambient air quality & stack emission.

This is for your kind information and records.

Thanking you,

Yours faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

- CC: (1) The Member Secretary, SEIAA, 3<sup>rd</sup> Floor, Panagal Maaligal, No.1 Jeenis Road, Saidapet, Chennai 600 005.
  - (2) The Member Secretary, TNPCB, Chennai 600 032.
  - (3) Zonal Officer, Central Pollution Control Board, South Zone Office, "Nisarga Bhawan", 1 st Floor, Thimmaiah Road, 7th 'D' Main, Shivanagar, Bengaluru-560 079.
  - (4) The Joint Chief Environmental Engineer, TNPCB,25, SIDCO Industrial Estate, Thuvakudi, Trichy 15.
  - (5) The District Environmental Engineer, TNPCB,25, SIDCO Industrial Estate, Thuvakudi, Trichy 15.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

Sir.

Sub: TNPL Unit -II - Air Quality Survey - Submission of reports - reg.

Ref: MOEFCC Environmental Clearance Letter No. F.NO.J-11011/172/2017-IA-II(I) dated 04.04.2019 issued to M/s. Tamil Nadu Newsprint and Papers Limited (Unit-II) for the proposed Mill Expansion Plan of Unit - 2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Mondipatti Village, K. Periyapatti village and Chettichatram village of Manapparai Taluk, Trichy District - reg.

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20<sup>th</sup> Oct 2023

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(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC: The Member Secretary, TNPCB, Chennai - 600 032.



20<sup>th</sup> Oct 2023

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(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC: Zonal Officer, Central Pollution Control Board, South Zone Office, "Nisarga Bhawan", 1 st Floor, Thimmaiah Road, 7th 'D' Main, Shivanagar, Bengaluru-560 079.



20<sup>th</sup> Oct 2023

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For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC: The Joint Chief Environmental Engineer, TNPCB, 25, SIDCO Industrial Estate, Thuvakudi, Trichy - 15.



20<sup>th</sup> Oct 2023

The Additional PCCF(C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 34, HEPC Building, Cathedral Garden Road, Nungampakkam, Chennai 600 034.

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(GIRISH A.DESHPANDE)

GENERAL MANAGER (R&D - QC)

CC:

The District Environmental Engineer, TNPCB, 25, SIDCO Industrial Estate, Thuvakudi, Trichy - 15.

# **Solar Lights**





### **Colour Coded Bins @ TNPL Unit-II**

As a part of environment protection and to maintain hygiene in work place 5 colour coded bins were placed at various places of the unit





### **TNPL UNIT II**

### **GREEN BELT DEVELOPMENT/IRRIGATION SCHEME**

The area allocated for greenery development under Captive Power Plant, Board Plant and Additional areas pertaining to TNPL Unit-II is summarized as below:

Power Plant (Mondipatti)

Total extent of Land Area (in Hectares)	16.187	
Green belt/Irrigation area developed (in Hectares):	6.465	
Board Plant (Mondipatti)		
Total extent of Land Area (in Hectares)	106.872	
Green belt/Irrigation area developed (in Hectares):	46.555	
Additional area in Chettichatram & K. Periyapatti		
Total extent of Land Area (in Hectares)	231.129	
Green belt/Irrigation area developed (in Hectares):	210.663	

Total Green Belt/Irrigation Area (in Ha): 5.665+36.155+210.663 = 272.949 Hect. i.e. Total area covered under plantation using treated effluent = 252.483 Hect.

TABLE A: Summary of TNPL Unit II Tree planting details as on 30.9.2023

SI No	Area	Total area so far covered in Hectares	Total No. of trees so far planted
01	Captive Power Plant (Mondipatti)	6.465	28,290
02	Board Plant (Mondipatti)	46.555	100590
03	Additional Area in Chetttichatram & K. Periyapatti	210.663	6,82,903

<sup>\*</sup>Out of 231.129 Hectares, 20.466 hectares are TNPL Unit – II Township. Remaining area of 210.663 Ha is under greenbelt area.

TABLE B:

Tree planted details in Captive Power Plant (Mondipatti) as on 30.09.2023

SI.		No. of
NO	Name of the Tree	Trees
1	Millingtonia (Maramalli)	520
2	Polyalthiya longifolia	48
3	Pongamia pinnata (Pungam)	305
4	Syzygium cumini (Jamun)	25
5	Terminalia catappa (Badam)	850
6	Thespesia populnea (Puvarasu)	80
7	Eucalyptus hybrid (Eucalyptus)	11899
8	Casuarina equisetifolia (Casuarina)	13744
9	Muntingia calabura (Singapore cherry)	16
10	Mimusops elengi (Mahilam)	21
11	Azadircta indica (Neem)	47
12	Kigelia pinnata (Siva kundalam)	21
13	Conocarpus erectus (Button wood)	300
14	Peltophorum pterocarpum (Pheltophorum)	396
15	Cassia Fistula (Sarakondrai)	2
16	Deloxix regia (Gulmuhar)	16
	TOTAL	28290

TABLE C:
Tree planted details in Board Plant (Mondipatti) as on 30.09.2023

SL.		No. of Trees
NO	Name of the Tree	
1	Acrocarpus	810
2	Azadirachta indica(Neem)	954
3	Casuarina	48,796
4	Dalbergia sisoo	15,108
5	Delonix regia (Gulmour)	287
6	Eucalyptus Hybrid	30,614
7	Ficus benghalensis (Alam)	104
8	Ficus religiosa (Arasu)	108
9	Fishtail palm	53
10	Lagerstroemia	34
11	Tectona grandis	637
12	Ficus Racemosa	10
13	Terminalia arjuna	100
14	Bauhinia purpurea	391
15	Thespesia populnea	95
16	Simarouba glauca	95
17	Conocarpus erectus	319
18	Millettia pinnata (Pungan)	500
19	Millingtonia hortensis	215
20	Mimusops elengi (Magilam)	200
21	Muntingia calabura (Singapur jerry)	200
22	Peltophorum pterocarpum	142
23	Terminalia catappa	370
24	Fishtail palm	110
25	Terminalia Mantaly	25
26	Albizia lebbeck	28
27	Samanea saman(Rain Tree)	285
	TOTAL	100590

TABLE D:
Tree planted details in Additional Area in Chetttichatram & K. Periyapatti as on 30.09.2023

S.No	Name of the Tree	No. of Trees
1	Acacia auriculiformis	10673
2	Aalamaram	209
3	Acacia Hybrid	28214
4	Amla / Naaval	3056
5	Arasu	65
6	Ashoka	1
7	Badam	2380
8	Bamboo	12881
9	Black pearl tree	5
10	Casai Siamia	4760
11	Cashewnut/Simaruba	2756
12	Casuarina equisetifolia	35154
13	Casuarina hybrid	221657
14	Casuarina junghuhniana	72953
15	Coconut (AT)	799
16	Coconut (D x T)	302
17	Coconut (Dwarf-Orange)	482
18	Coconut (ECT)	1839
19	Coconut (T x D)	1625
20	Coconut (WCT)	448
21	Croscentia cujete	5
22	Eucalyptus Hybrid	55811
23	Gmelina arborea	240
24	Guava/ Jack/ pithcelobium/Lemon	5905
25	Gulmohar	212
26	Iluppai	211
27	Kadam	15551
28	Karungali	8
29	Khaya	9150
30	Leuceana	10060
31	Mahagony	10871
32	Mango	10000
33	Melia	28385
34	Neem	11395
35	Neer marudhu	5335
36	Night queen tree	5
37	Noni maram	5

38	Peltophorum	30
39	Pomegranate	2000
40	Poovarasu/Pungan	6557
41	Punnai	5
42	Puthrajeevi	5
43	Red sandal	3000
44	Rose wood	2740
45	Sandal	2271
46	Sappota /Seethapal	907
47	Silk cotton	2200
48	Silver Oak	700
49	Sissoo	64645
50	Soap nut	5
51	Star fruit	5
52	Tamarind	2975
53	Teak	20963
54	Vagai	2777
55	Vasambu	5
56	Vengai	800
57	Water apple	5
58	Banana	3500
59	Conocarpus erectus	450
60	Khaya anthotheca	500
61	Vachellia nilotica	200
62	Madhuca longifolia	400
63	Terminalia bellirica	1850
	Grand Total	6,82,903

## View on Flora



Coconut plantation (Cocus nucifera)



Teak (Tectona grandis)



Arjun Tree (Terminalia arjuna)



African mahogany (Khaya scenegalensis)



Pungan (Millettia pinnata)



Butter Tree (Madhuca longifolia)



Casuarina (Casuarina sps)



Guava (Psidium gujava)



Sapota (Manilkara zapota)



Mango (Mangifera indica)



Badham (Terminalia catapa)



Eucalyptus (Eucalyptus sps)



Neolamarckia cadamba (Cadambam)



Thespesia populnea (Poovarasu)



Acacia mangium (Mangium)



Cassia siamina (Manjalkonrai)

## **View of Herbs**



Sickle bush



Jackal jujube

## View of Fauna



**Cat Snake** 



**Grey slender loris** 







Camelian



Bar-headed goose



Black winged stilt



Shikra



Peacock pansy



Saw-scaled viper



Road Avenue (Elephant Ear Trees)



Wet land habitat for birds



Wet land habitat for birds

# PROCEEDINGS OF THE DIRECTOR OF INDUSTRIAL SAFETY AND HEALTH, (FAC) CHENNAI

## PRESENT: THIRU.K.JAGATHESAN, M.E., ABSTRACT

The Factories Act 1948 and the Tamil Nadu Factories Rules 1950 – The Tamil Nadu Control of Industrial Major Accident Hazardous Chemicals Rules 1989 – On Site Emergency Plan of Tamil Nadu News Print and Papers Ltd, Unit –II, Mondipatti Village, K.Periyapatti Post, Manapparai Taluk, Trichy District 621 306 (TPL - 3208) – Recorded.

R.Dis H2/5665/2022

Dated: 27.07.2022

Read: Letter from Management Dated: 05.03.2022

#### ORDER:

The Management of Tamil Nadu News Print and Papers Ltd, Unit –II, Mondipatti Village, K.Periyapatti Post, Manapparai Taluk, Trichy District 621 306 (TPL – 3208) has prepared an 'On-Site Emergency preparedness plan' pertaining to their factory and submitted to this office.

Taking into consideration of the information furnished by the management in the 'On-Site Emergency Plan' and in exercise of the power conferred under section 41 B (4) of the factories Act 1948 and the Rule 13 (1) of Tamil Nadu control of Industrial major Accident hazardous chemicals Rules 1989 (as amended in 1994 and 2000) the Director of Industrial Safety and Health, Chennai hereby records the On-Site Emergency preparedness plan of the above said factory subject to the following conditions:

- The On-Site Emergency Plan submitted by the management is recorded only for the conditions prevailing on the date of receipt of the On-Site Emergency Plan.
- If there is any change in the layout of machinery, plant, process or any other modification are carried out a fresh On-Site Emergency Plan in accordance of such modifications should be prepared and submitted again for approval.

- 3. Full Scale On-Site Emergency mock drill should be conducted once in 6 months, involving the officials from the Directorate of Industrial Safety and Health, Fire and Rescue services department, Medical Department, Pollution Control Board and the adequacy of the emergency response measures, shall be assessed and the outcome of the mock drill shall be periodically reported to the Director office.
- 4. Emergency organization chart for General shift and after general shift has been prescribed in the On Site Emergency Plan. But the roles and responsibilities of key person furnished in the On Site Emergency Plan does not contain the shift wise emergency response measures to be taken.

Hence roles and responsibilities of the key person during General shift and after General shift shall be clearly assigned to each person and the details in this regard shall be furnished in the On Site Emergency Plan.

- 5. In the coal storage area, adequate lighting facility shall be provided.
  - 6. Workers is coal handling area shall be periodically tested to diagonise lung infection as the workers ability to fight against the infection may be over whelmed by in hating coal dust, making the workers more susceptible to lung disease.

Record of periodical medical examination shall be maintained is Health register.

- 7. As hydrogen peroxide tends to accelerate when exposed to heat, runaway reactions are possible and hence temperature and pressure control system shall be monitored periodically. Further hydrogen per oxide shall be stored is well ventilated area.
- 8. Suitable Audio visual alarm shall be provided in the water Treatment plant to caution if the conductivity of water exceeds as the water is capable to pars electrical flow.
- 9. Safe work practices followed to carryout maintenance and other activity and critical review of each system shall be carried out. Also the scope and need for its improvement shall be made. Details in this regard shall be furnished in the On Site Emergency Plan.
- 10. Intensive training on operation of fire extinguishers shall be imparted to all workers including contract workers and ensure that trained persons are available during all shifts.
- 11. Hazardous area classification drawing shall be displayed for identification of hazardous areas.

12. Thickness of the pipe line carrying chlorine shall be monitored. Also checklist shall be made available for the chlorine pipe line joints, material specification for change of pipe line and the same shall be monitored as a "corrosion protection measure".

Details on the compliance status shall be furnished in the On Site Emergency Plan.

- 13. Accident reporting system shall be developed including 'near miss' incident and periodical review on these incidents shall be carried out to avoid recurrence of such incidents.
- 14. Emergency escape route shall be clearly defined and marked with sign Boards at prominent places.
- 15.MSDS of all chemicals shall be made accessible upon request for reference.
- 16. Audibility of alarm system shall be reviewed periodically and ensure that siren sound is available to all areas of the plant.
- 17.Contract workers shall also be imparted training on emergency procedure to be followed during an emergency.

(S/d.K.Jagathesan)
Director (FAC),
Industrial Safety and Health,
Chennai-32.

To
The Occupier,
Tamil Nadu News Print and Papers Ltd,
Unit –II, Mondipatti Village,
K.Periyapatti Post, Manapparai Taluk,
Trichy District 621 306.

#### Copy to:

- 1.The Joint Director, Industrial Safety & Health, Trichy.
  (He is requested to monitor the compliance of the conditions by the Management during his regular inspection.)
- 2. Additional Director, Industrial Safety & Health, Trichy.
- 3. Spare Copy
- 4. Stock File

//Forwarded by Order//

for Director (FAC), Industrial Safety and Health, Chennai –32.

27/07/2022

## TAMILNADU NEWSPIRNT AND PAPERS LIMITED, UNIT-II, MONDIPATTI

## **OHC:**

Aim of Occupational Health Centre (OHC) is mainly preventing occupational hazards at working place and Triage care center for injuries. We are also providing rehabilitation of accidental occupational injuries.



#### **Objective:**

- i) To promote good health at working place.
- ii) To provide medical treatment & as well as minor surgical treatment like (Suturing & dressing)
- iii) Providing health education to the employees regarding (ear, eye safety etc.,) during work time.
- iv) Providing first aid and other related training to the employees.

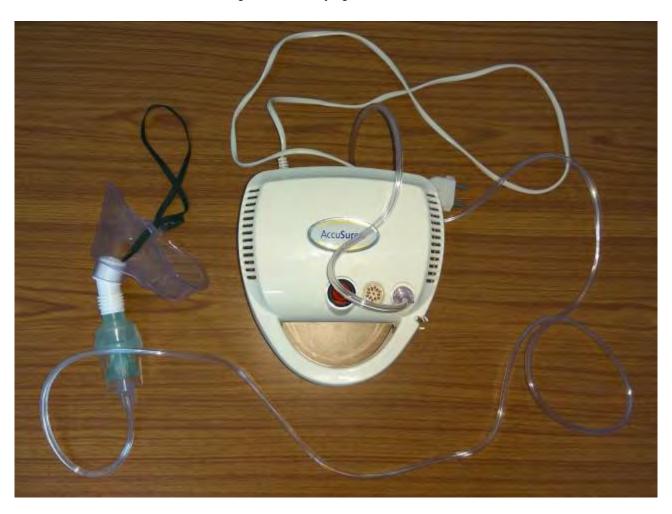
#### **OHC & It's equipments:**

OHC is managed by 4 doctors, 4 staff nurses. In our OHC we are having following

equipments for patient purpose.

## Nebulizer:

M/C used for treatment of COPD, Asthma, other pulmonary diseases. We are having one nebulizer. Nebulizer use  $O_2$ , suspensions (dry) powder form.



<u>ECG</u> – is used to measure the position & size of chambers rate & regularity of heartbeats. It also used to detect cardiac diseases like (CAD, MI, AF, LVH) we are having 1 latest model ECG Machines.



## **Suction Apparatus:**

A device used for removing liquids by suction liquids like (serous, mucus) from a body Cavity mainly (Abdomen & Oral cavity & Nasal cavity).

We are having 1 suction apparatus to handling any kind of accidental emergencies.



## **Infra Red Lamp:**

Mainly used for pain over the body parts, mainly Neck pain & joint pain & neuropathic pain. Arthiritic pain, we are having one Infra red lamp used for acute & chronic pain.



#### **Otoscope:**

This device mainly used to see the ear for any (perforation of TM, any kind of foreign body also detect by this device. This instrument used to mainly see the outer & middle ear complaints, we are having one Otoscope device with help of device we can remove the FB also. Aurul toileting also done.



## **BPApparatus:**

It is mainly used to measure the systolic & diastolic blood pressure of the person. It used detect hypertension & hypotension for further line of management. We are having 2 BP



Apparatus.

## **Pharmacy:**

The OHC has well stocked medicine storage room. We are having wide range of drugs, suture materials, emergency drugs like (Atropin, Hydrocortisone, Adrenaline) etc., we are having IV fluids for treatment of dehydration & hypotension & AGE (Diarrhoea).



## **Autoclave:**

This device used to sterilize the cotton & gauze piece & suturing instrument like (needle holder, Artery forceps, toothed forceps. we are having one Autoclave machine.



## O<sub>2</sub> Cylinder:

We are having two  $O_2$  cylinder, one in our OHC ward another one in our Ambulance used for any head injury person & as well as breathing difficulty person. When  $SPO_2$  decrease

95% . we will use this  $O_2\,\text{cylinder}$  machine.



## **Ambulance:**

A vehicle used for transportation of sick (or) injured persons from the injured place to OHC for further line of management for an injury (or) illness. We are having one Ambulance with

## O<sub>2</sub> cylinder.





## भारत सरकार /Government of India वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन *IPetroleum & Explosives Safety Organisation (PESO)* A और D - विंग, ब्लॉक 1-8, दूसरा तत्, शास्त्री भवन, 26 हड्डीउस रोड, नुंगम्बकम

चेन्नै- 600006 A & D - Wing, Block 1-8, Ind Floor, Shastri Bhavan, 26 Haddous Road, Nungambakkam, Chennai - 600006

इमेल /E-mail : jtccechennai@explosives.gov.in "

दूरभाष /Phone/Fax No : 044 -

दि/Dated : 24/05/2022

28287118,28281023,28281041,28287119/28284848

₹ /No : G/SC/TN/06/3229(G89479)

Pin: 621306

सेवा में /10,

M/s. M/s. TAMILNADU NEWSPRINT AND PAPERS LIMITED UNIT-, MONDIPATTI, K.PERIYAPATTI POST,, Village/Town: Mondipatti,

City: Manapparai, Taluka: Manapparai, District: TIRUCHIRAPPALLI State: Tamil Nadu

विषय /Sub:

Survey No: 2/1,2,6/1,2,3, mondipatti, Village/Town: Mondipatti, City: Tiruchirappalli, Taluka: Manapparai, District: TIRUCHIRAPPALLI, State: Tamil Nadu, Pin : 621306 - में सिलेंडरों में CHLORINE, SULPHUR DIOXIDE गैस का भंडारण- गैस सिलेंडर नियम, 2016 के फार्म एफ के अंतर्गत – निरीक्षण एवं अनुप्ति को पृष्ठी के बारे में/Storage of CHLORINE, SULPHUR DIOXIDE in cylinders at Survey No: 2/1,2,6/1,2,3, mondipatti, Village/Town: Mondipatti, City: Tiruchirappalli, Taluka: Manapparai, District: TiRUCHIRAPPALLI, State: Tamil Nadu, Pin : 621306 - cover under Licence G/SC/TN/06/3229(G89479) granted in Form F of Gas Cylinders Rules, 2016 - Inspection & Endorsement of licence regarding.

महोदय/Sir(s),

कृपया इस कार्यालय के दि. 13/04/2022के ज्ञापन सं G/SC/TN/06/3229(G89479) और दि. 13/04/2022 को उपरोक्त परिसर का अधोहस्तोोक्षरकर्ता/ इस कार्यालय के পুৰুষা হল বানাৰে ক'মে, নিচাৰ্কাহতহ্বৰ ৰাজ্য সভাৱত নিষ্টাৰ্কাৰ কৰে প্ৰতিবাদিকাৰ কৰিছিল। বিষয়ে কিন্তু নিৰ্দাৰ কিন্তু প্ৰতিবাদিকাৰ কৰিছিল। বিষয়ে কিন্তু নিৰ্দাৰ কিন্তু প্ৰতিবাদিকাৰ কৰিছিল। বিষয়ে কিন্তু নিৰ্দাৰ কিন্ত

The subject licence is returned herewith duly endorsed. The receipt of the licence may please be acknowledged.

कृपया नोट करें कि गैस सिलेंडर नियम, 2016 के नियम 55(5) के अनुसार, अनुज्ञाप्ति के पुनः नवीकरण हेतु आवेदन this office कार्यालय को इस अनुजाप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2026 को या इससे पूर्व) जमा कर दें । दिनांक 30 सितम्बर 2026 के पक्षात परंतु दिनांक 30 सितम्बर 2027 से पूर्व प्राप्त नवी-ीकरण आवेदन, गैस सिलेंडर नियम, 2016 के नियम 55(7) के अनुसार विलंब शुल्क के साथ ही विचाराधीन होगा । दिनांक 30 सितम्बर 2027 तक कोई नवीनीकरण आवेदन प्राप्त नहीं होने की स्थिति में यह अनुज्ञप्ति स्वतः निरस्त हो जाएगी । /Please note that your application for further renewal should reach this office on or before 30<sup>th</sup> Septemebr, 2026 along with all the documents as required under Rule 55(5) of Gas Cylinders Rules , 2016. Application for renewal of licence received after 30<sup>th</sup> September, 2026 but not later than 30<sup>th</sup> September, 2027 be considered only with penalty fee vide rule 55(7) (a)(b) of said Rulos. The licence will automatically expire if no application is received upto 30th September, 2027.

भवदीय /Yours faithfully,

((डा. ए. घोख हुनीन) (Dr. A SHEIK HU (AIN)) विस्फोटक निर्देशक Controller of Explosives कृते संयुक्त भुख्य विस्कोटक नियंत्रक For Jt. Chief Controller of Explosives चेत्रै/Chennai

[अधिक जानकारी जैसे आवेदन की स्थिति, शुल्कक तथा अन्यय विवरण के लिए कृपया हमारी वेबसाइट http://peso.gov.in देखें 1] (For more information regarding status,fees and other details please visit our website http://peso.gov.in)

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ोभनुइंग्ति संख्या/ Licence No. : G/SC/TN/06/3229(G89479)

वार्षिक शुल्का रू/Fee Rs. 2000/- per year

पाषक शुल्का रू/Fee Rs. 2000/- per year M/s. TAMILNADU NEWSPRINT AND PAPERS LIMITED UNIT-I, MONDIPATTI, K.PERIYAPATTI POST,, City: Manapparai, Taluka: Manapparai, District: TIRUCHIRAPPALLI, State: Tamil Nadu, Pin: 621306 को नीचे वर्णित और रेखांक संख्या G/SC/TN/06/3229(G89479) dated 13/04/2022 में दर्शित किए गए अनुज्ञप्त परिसर में, राखने के लिए ही विधिमान्य अनुज्ञप्ति दी जाती है। /

Licence is hereby granted to M/s. TAMILNADU NEWSPRINT AND PAPERS LIMITED UNIT-I, MONDIPATTI, K.PERIYAPATTI POST, City: Manapparai, Taluka: Manapparai, District: TIRUCHIRAPPALLI, State: Tamil Nadu, Pin: 621306 valid only for the possession of cylinders filled with compressed gas in the licensed promises described below and shown in the plan No G/SC/TN/06/3229(G89479) dated 13/04/2022 subject to the provisions of the Explosives Act, 1884(4 of 1884) and the Rules made thereunder and to the further conditions of this licence.

यह अनुश्रति 30 सितम्बर 2026 तक प्रवृत्त रहेगी । / The Licence shall remain in force till the 30<sup>th</sup> September 2026.

April 13, 2022

For Jt. Chief Controller of Explosives Chennai कृते संयुक्त मुख्य विस्फोटक नियंत्रक

अनुज्ञप्त परिसर का विवरण और अवस्थिति। DESCRIPTION AND LOCATION OF THE LICENSED PREMISES

िप्रलिखित विवरण के अनुसार सिलेण्डरों में भरी गैस रखने के लिए अनुज्ञप्त परिसर, जिसकी अभिन्यास सीमाओं और अन्य विशिष्टियों को संलग्न अनुमोदित रेखांक सं G/SC/TN/06/3229 dated April 13, 2022 में दिखाया गया है, में अवस्थित है और जिसमें एक भण्डारण शेड है। / The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. G/SC/TN/06/3229 dated April 13, 2022 are situated at Mondipatti and consists of a storage shed for possession of the gas

	गैस का प्रकार /Type of Gas	मात्रा /Quantity
a)	diget/ Toxic	CHLORINE - 76 Nos., SULPHUR DIOXIDE - 24 Nos.
	नार विषय और गर ज्वलनशाल /Non-Toxic and Non Flammable	R 31739 NIL
c)	गैर विषेले और ज्वलनशील /Non-Toxic and Flammable	NIL
u)	धुलित एसिटिलीन गैस Dissolved Acetylene Gas	NIL
e)	एलपीजी के अलावा गैर विषेले और ज्वलनशील द्रवित गैस /Non-Toxic & Flammable liquefiable gas other than LPG	NIL
f)	एलपीजी/ Liquefied Pertoleum Gas	NIL

और प्लाद संख्या SurveyNo : 2/1,2,6/1,2,3 गली का नाम गांव : Mondipatti या नगर पुलिस थाना : Manapparai जिला : TIRUCHIRAPPALLI,राज्या : Tamil Nadu. / and is situated at SurveyNo : 2/1,2,6/1,2,3 Village/Town : Mondipatti Police Station : Manapparai District : TIRUCHIRAPPALLI, State: Tamil Nadu. नवीकरण के प्रशंकन के लिए स्थान / SPAC

17	नवीकरण की तारीख/Date of	समाप्ति की तारीख/Date of	अनुज्ञप्ति प्राधिकारी के हस्ताजक्षर/Signature
	Renewal	Expiry	and stamp of the licensing authority
इस अनुज्ञाप्त को, विस्फोटक अभिनयम, 1884 या उसके अधीन बनाए गए गेस सिलेण्डर नियम, 2016 के उपबंधों या इस अनुज्ञाप्ति की शर्ती का उल्लंघन न होने की दशा में, फीस में कोई कुट दिए बिना दस वर्ष तक नवीकृत किया जाएगा I/This licence shall be renewable without any concession in fee for ten years in the absence of contravention of the provision of the Explosives Act, 1884 or Gas Cylinders Rules, 2016, framed thereunder or of the conditions of the licence	THE STATE OF THE S		and stamp of the licensing authority

यदि अनुज्ञाप्त परिसर इससे उपाबद्ध विवरण और शर्तों के अनुरुप नहीं पाया जाता है और जिन नियमों और शर्तों के अधीन यह अनुज्ञप्ति दी गई है, उनमे से किसी का उल्लंघन होता है तो यह अनुज्ञप्ति रह्न की जा सकती है और अनुज्ञप्ति का धारक कारावास से, जिसकी अवधि दो वर्ष तक की हो सकेगी, या जुमनि से, जो तीन हजार रुपये तक का हो सकेगा, या दोनों से, दण्डनीय भी होगा 17 This licence is liable to be cancelled if the licenced premises are not found conforming to the description and conditions attached hereto and contravention of any of the rules and conditions under which this licence is granted and the holder of this licence is also punishable with imprisonment for the term which may extend to two years or with fine which may extend to three thousand rupees or with both.

#### गैस सिलेंडर नियम, 2016 के अधीन विपाक्त गैस कंटेनरों / सिलेंडर के भरण एवं भंडारण के लिए अतिरिक्त शतीं/ADDITIONAL CONDITIONS FOR FILLING AND OR STORAGE OF TOXIC GASES CONTAINERS/CYLINDERS UNDER GAS CYLINDEDRS RULES, 2016.

- परिसर में परिचालन स्विच के साथ एक प्रभावशाली अलार्म प्रणाली की व्यवस्था की जाएगी। आपात स्थिति में, परिसर में स्विच ऑपरेट करने पर नियं के कक्ष में अलार्म सुना जा सकेगा।/An efficient alarm system with operating switch in the premises shall be provided. In case of emergency, the alarm can be heard in the control room by operating the switch in the premises.
- विषाबत मैस के रिसाव की आपात स्थिति के लिए एक आपदा प्रबंधन योजना तैयार की जाएगी। योजना द्वारा संबंधित अधिकारी की जिम्मेपदारी तय की जाएगी, जिन्हें। रिसाव की स्थिति में विषाबत मैस उपकरणों को संचालित करने के विभिन्न पहलुओं के बारे में प्रशिक्षित किया जाएगा।/A Disaster Management Plan for operation in case of emergency of leakage of toxic gas shall be prepared. The plan shall fix responsibility on the concerned officers who shall be trained in the different aspects of handling toxic gas equipments in case of leakage.
- 3. आपात स्थिति में उपयोग के लिए परिसर में या इसके पास एक या अधिक पर्याप्त दबाव के हायडूंट पॉइंट्स उपलब्ध कराए जाएंगे।/One or more hydrant point(s) with adequate pressure shall be provided in or near the premises for use in emergency.
- परिशर में कम दो आत्म निहित श्वास तंत्र (रोल्फ कंटेंड ब्रीदिंग अॅपरेटस) और दो कनस्तर प्रकार के गैस मास्क सहज सुलभ स्थान में रखे जाएंगे ।/At least two numbers self contained breathing apparatus and two Canister type Gas Masks shall be kept in the premises in a readily accessible location.
- 5 परिसर में या इसके पास विषाक्त गैस के रिसाव का पता लगाने के लिए पोर्टेबल उपकरण उपलब्ध कराया जाएगा।/Portable devices for detection of toxic gas leakage shall be made available in or near the premises.
- हवा की दिशा निर्धारित करने के लिए उपयुक्त स्थान पर एक वातदिग्दर्शक-मुर्ग उपलब्ध कराया जाएगा जिससे विषाक्त गैस के रिसाव की स्थिति में श्रिमकों को हिला के विरुद्ध दिशा में स्थानांतरित किया जा सकें।/A weathercock shall be provided at a suitable location for determining wind direction so that in case of leakage of toxic gas, the workers can move against wind direction.
- अनुश्विधारी के पास विभिन्नए उपकरण और औजार, जैसे सिलेंडर और टनरों के लिए वाल्वn हूड, सिलेंडर वाल्व रिसाव के लिए क्लैं प और टनरों के वॉल्वे के रिसाव के लिए वेन और योक असेंबलि सहित उपकरणों से मिलकर बनी आपातकालीन किट उपलब्ध होनी चाहिए I/Emergency kit consisting of various appliances and tools including valve hood assembly for cylinders and tonners, clamp for cylinder valve leaks and chain and yoke assembly for tonner valve leaks shall be available with the licensee.
- 8. सर्वेश के बंद होने/ लॉक-अप के मामले में, परिसर में कोई विषाक्त गैस युक्त सिलेंडर नहीं रखा जाएगा।/In case of closure/cock-up of the filling plant, no cylinder containing toxic gas shall be retained in the premises.
- 9 रिसाव के मामले में विषाक्त गैस के निष्प्रभावीकरण के लिए पर्याप्त सुविधाएं प्रदान की जाएगी I/Adequate facilities for neutralization of toxic gas shall be provided in case of leakage.
- 10. विधावत गैरा परिसर में उचित सिलेंडर लदान (लोडिंग)/माल उतराई (अनलोडिंग) और हथलाई (हैंडलिंग) की व्यवस्था की जाएगी।/Proper cylinder loading/unloading and handling arrangements shall be made in the toxic gas premises.

for Jt. Chief Controller of Explosives South Circle Office कृते संयुक्त मुख्य विस्फोटक नियंत्रक चेत्रै

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भारत सरकार/Government of India वाणिज्य और उद्योग मंत्रालय/Ministry of Commerce & Industry पेट्रोलियम तथा विस्फोटक सुरक्षा संगठन (पैसो) /Petroleum & Explosives Safety Organisation (PESO) A और D - विंग, ब्लॉक 1-8, दूसरा तल, शास्त्री भवन, 26 हब्रुोउस रोड, नुंगम्बक्कम सेन्नै- 600006

A & D - Wing, Block 1-8, IInd Floor, Shastri Bhavan, 26 Haddous Road, Nungambakkam, Chennai - 600006

ईमेल/E-mail : jtccechennal@explosives.gov.in

फोन / फ़ैक्स नंबर:/Phone/Fax No : 044 -

28287118,28281023,28281041,28287119/28284848

दिनांक/Dated : 11/07/2022

संख्या/No : S/SC/TN/03/212(S100682)

To,

M/s. M/s. TAMIL NADU NEWSPRINT & PAPERS LTD,

67 ,MOUNT ROAD,

GUINDY, Chennai,

Taluka: Chennai, District: CHENNAI, State: Tamil Nadu PIN: 600032

विषय/Sub: F

Plot No, UNIT-II, MONDIPATTI, MONDIPATTI, Manapparai, Taluka: Manapparai, District: TIRUCHIRAPPALLI, State: Tamil Nadu, PIN: 621306 स्थित OXYGEN, गैस के संपीडित पात्र / पात्रों में भंडारण के लिए स्थिर एवं गतिशील दाब पात्र (अज्वलित) नियम, 2016 के अधीन स्वीकृत अनुज्ञप्ति संख्या S/SC/TN/03/212 अनुज्ञप्ति निशीक्षण एवं पृष्ठांकन के बारे में/Storage of OXYGEN gas in pressure vessels at Plot No, UNIT-II, MONDIPATTI, Manapparai, Taluka: Manapparai, District: TIRUCHIRAPPALLI, State: Tamil Nadu, PIN: 621306 - Licence No : S/SC/TN/03/212 grant in form LS-1A of SMPV(U) Rules, 2016-Endorsement of Licence Regarding

महोदय/Sir(s),

कृषया Jt. Chief Controller of Explosives South Circle Office's के ज्ञापन सं S/SC/TN/03/212 (S100682) दिनांक 23/06/2022 का संदर्भ और अधोहस्ताक्षकर्ता/ कार्यालय के अधिकारी द्वारा उपरोक्त परिसरों के किए गए निरीक्षण दिनांक 06/07/2022 का संदर्भ ग्रहण करें/ Please refer to the Jt. Chief Controller of Explosives South Circle Office's Memo No. S/SC/TN/03/212 (S100682) Dated 23/06/2022 and inspection of the above premises by an officer of this Department on 06/07/2022 .

इस विषय लाइसेंस के साथ इसे पृष्ठांकन किया जाता है। लाइसेंस की प्राप्ति कृपया स्वीकार कर लें।/The subject licence is forwarded herewith duly endorsed. The receipt of the licence may please be acknowledged.

देर शुल्क से बचने के लिए एसएमपीवी (यू) नियम, 2016 के नियम 55 के अंतर्गत अनुज्ञप्ति के पुनः नवीकरण हेतु आवेदन, इस कार्यालय को इस अनुज्ञप्ति की वैधता समाप्त होने के पूर्व (दिनांक 30 सितम्बर 2026 को या इससे पूर्व) जमा कर दें // Please note that your application for further renewal shall reach this office on or before 30th September, 2026 along with all the documents required under Rule 55 of the SMPV(U) Rules, 2016 to avoid late fee.

भवदीय/Yours faithfully.

((सनोज एन नंदनवार) (Manoj N Nandanwar)) उप विस्फोटक नियंत्रक Dy. Controller of Explosives कृते संयुक्त मुख्य विस्फोटक नियंत्रक For Jt. Chief Controller of Explosives चेत्रै/Chennai

(For more information regarding status, fees and other details please visit our website http://peso.gov.in)

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नरीक्षण उ Endorse: +

#### FORM LS-1A/प्ररुप - एलएस-1क

(See Rules 50, 51, 54 and 55)/(नियम 50 , 51, 54 और 55 देखें)

Licence to Store Compressed gas in pressure vessel or vessels Regulation टाब पात्र या पात्रों में संपीडित गैस भण्डारकरण के लिए अनुज्ञप्ति A. C.C.E. S.C. Chennal

अनुज्ञप्ति सं/Licence No. : S/SC/TN/03/212(S100682)

फीस रुपए/Fee<sup>®</sup>Rs. **50000**/- per year/प्रति वर्ष

Licence is hereby granted to M/s. TAMIL NADU NEWSPRINT & PAPERS LTD, 67 ,MOUNT ROAD ,GUINDY,Chennai, Taluka: Chennai, District: CHENNAI, State: Tamil Nadu PIN: 600032 valid only for the storage of compressed gas in 2 Number(s) of pressure vessels as indicated below in the licensed premises described below and shown in the plan No.S/SC/TN/03/212(S100682) dated 23/06/2022 subject to the provisions of the Indian Explosives Act, 1884 (4 of 1884) and the rules made thereunder and to the further conditions of this licence,

श्री M/s. TAMIL NADU NEWSPRINT & PAPERS LTD, 67 ,MOUNT ROAD ,GUINDY,Chennai, Taluka: Chennai, District: CHENNAI , State: Tamil Nadu PIN: 600032 को नीचे वर्णित अनुज्ञप्त परिसरों में और रेखांकन संख्या S/SC/TN/03/212(S100682) dated 23/06/2022 में भारतीय विस्फोटक अधिनियम, 1884 (1884 का 4) और उसके अधीन बनाए गए नियमों तथा इस अनुज्ञप्ति की अन्य शर्तों पर 2 दाब पात्र / पात्रों में संपीड़ित गैस के भण्डारण के लिए अनुज्ञप्ति मंजूर की जाती है।

यह अनुराप्ति 30 सितंबर 2026 तक प्रवृत्त रहेगी।

The Licence shall remain in force till the 30th September2026.

	गैस का नाम	State of Gas/ गैस की स्थिति	Water Capacity in cubic meter/ जल क्षमता (घ.मी.)	Max. working Pre.(kg/cm²)/ अधिकतम वर्किंग प्रेशर	Quantity Granted in kgs(Liquified gas)/किलोग्रॅम में जारी मात्रा (लिक्विफाईड गैसेस)
22860-150-0063		Gaseous	60.00	27.5	7
22860-150-0064	OXYGEN	Gaseous	60.00	THE PERSON NAMED IN COLUMN TWO IS NOT THE PERSON NAMED IN COLUMN TWO IS NAMED IN COLUMN TW	
Total Water capacity			120.00		

June 23, 2022

For Jl. Chief Controller of Explosives SC, Chennai कते संयुक्त मुख्य विस्फोटक नियंत्रक

## DESCRIPTION AND LOCATION OF THE LICENSED PREMISES/अनुज्ञप्त परिसर का विवरण और अवस्थिती

The licensed premises, the layout boundaries and other particulars of which are shown in the attached approved plan No. S/SC/TN/03/212 dated 23/06/2022 are situated at ManapparaiMONDIPATTI and consists of 2 Number(s) vessel(s) for storage of :/अनुज्ञप्त परिसर, प्रदर्शित सीमा और अन्य विवरण जो संलग्न अनुमोदित रेखाचित्र क्र.S/SC/TN/03/212 दिनांक 23/06/2022 मे दर्शाए गए है ManapparaiMONDIPATTI पर स्थित है और इसमे 2 वेसल सम्मिलित है।

- a) Flammable/Corrosive/Toxic Gases :/ज्वलनशील / संक्षारक / विषेली गैसों:
- b) Non-Toxic Gases :/अविषेली गैसों : OXYGEN

and is situated at PlotNo : UNIT-II Village/Town :ManapparaiMONDIPATTI Police Station : mannaparai District : TIRUCHIRAPPALLI, State: Tamil Nadu , Pin : 62.

/प्लाट संख्या PlotNo : UNIT-II गांव या नगर :ManapparaiMONDIPATTI पुलीस थाना mannaparai जिला TIRUCHIRAPPALLI राज्य Tamil Nadu , Pin : 62 में स्थित है।

SPACE FOR ENDORSEMENT OF RENEWALS/नवीकरण के प्रशंकन के लिए स्थान

	Date of Renewal/ नवीकरण की तारीख	अनुज्ञप्ति की समाप्ति की तारीख	Signature and stamp of the licensing authority/अनुज्ञापन प्राधिकारी के हरताक्षर और कार्यालय की मुद्रा
This licence shall be renewable without any concession in fee for three years in the absence of contravention of the			वन नायान यम सुन्ना

- rule 70 and every facility shall be afforded to such officer for ascertaining that the rules and the conditions of
- 19. If the licensing authority calls upon the holder of a licence by a notice in writing to execute any repairs in the licensed premises which are, in the opinion of such authority, necessary for the safety of the premises, the holder of the licence shall execute the repairs within such period as may be specified in the notice.
- 20. Every vessel shall be outside any building and shall be supported on well designed calculations.
- 21. No artificial light capable of igniting flammable vapour shall at any time be present within nine meters of the vehicle and the loading or unloading points during the transfer of the compressed gas and no person engaged
- 22. All electrically equipment such as motors switches, starters used for transfer of liquefied petroleum gas shall be of flameproof construction conforming to IS/IEC 60079-1 to 11 or of a type approved by the Chief
- 23. Smoking, naked lights, lamps, source of fire or any other stimulant capable of igniting flammable vapours shall not be allowed inside the premises. Every person managing or employed on or in connection with licensed premises shall abstain from any act whatsoever which tends to cause fire or explosion and which is not reasonably necessary and to the best of his ability, shall prevent any other person from doing such act.
- 24. Any accident, fire explosion or untoward incident occurred within the licensed premises shall be immediately reported to the Chief Controller of Explosives, Controller, nearest police station and District Magistrate by quickest mode of communication.

For The Jt. Chief Controller of Explosives, South Circle, Chennai



## **Tamil Nadu Newsprint and Papers Limited**

#### INTEGRATED MANAGEMENT SYSTEM POLICY

Tamil Nadu Newsprint and Papers Limited (TNPL), Tamil Nadu, India, manufacturers of Pulp, Paper, Paper Board, Cement and Paper Core Pipes, as part of implementing its Integrated Management System is committed to

- > Design, Manufacture and Supply of quality products by adopting contemporary technologies for the overall efficiency in a clean environment.
- Achieve Quality, Energy, Environment, Health and Safety objectives through sustained R & D efforts and process improvements.
- Ensure continual improvements in the process and technology to attain consistent Quality, optimized Energy utilization, Environmental protection, sustaining Occupational Health and Safety Management Systems.
- Comply with all legal and other requirements.
- Comply and Report the Environmental performance of its facilities and compliance on all relevant environment legislation and regulation to the Board of Directors and stake holders, by forming a separate Environment Management Cell for analysing, taking counter measures.
- Stimulate rational usage of Water, Energy and other Natural Resources through technological improvements and behavioural aspects.
- Minimize waste and Maximize reuse/recycling.
- Provide safe and healthy work environment for the prevention of work-related injury and ill health.
- ➤ Eliminate hazards and reduce Occupational Health & Safety risks by conducting safety audit and risk assessment periodically.
- Ensure consultation and participation of workers or workers' representatives in sustaining Occupational Health and Safety Management System.
- Enhance customers satisfaction by supply of quality products at optimal cost and timely delivery.
- > Empower employees to work towards contributing to and improving the Integrated Management System in the organization.
- ➤ Integrate Quality, Energy, Environment, Health and Safety requirements with business decisions by adopting the Manufacturing Excellence Model.

Issue No: 02

November 16, 2020

S. Sivashanmugaraja, I.A.S., Managing Director



## தமிழ்நாடு செய்தித்தாள் காகித நிறுவனம்

## ஒருங்கிணைந்த பேலாண்மை அமைப்பு கொள்கை

இந்திய திருநாட்டில், தமிழகத்தில் காகிதக் கூழ், காகிதம், காகித அட்டை, சிமெண்ட், காகித உருளை குழாய் ஆகியவற்றை உற்பத்தி செய்யும் தமிழ்நாடு செய்தித்தாள் காகித நிறுவனம், தனது ஒருங்கிணைந்த மேலாண்மை அமைப்பினை செயல்படுத்துவதின் ஒரு பகுதியாக கீழ்க்காணும் கொள்கைகளை கடைப்பிடிக்க உறுதி பூண்டுள்ளது.

- தூய்மையான சூழலில் தற்கால தொழில்நுட்பத்தை கடைபிடித்து முழுத்திறனுடன் கூடிய தரமான
   உற்பத்திப் பொருட்களை வடிவமைத்து, தயாரித்து, வாடிக்கையாளர்களுக்கு வழங்குதல்.
- தரம், ஆற்றல், சுற்றுச்சூழல், சுகாதாரம் மற்றும் பாதுகாப்பு ஆகியவற்றின் நோக்கங்களை நிலையான தொழில்நுட்ப ஆராய்ச்சி மற்றும் செயல்முறை மேம்பாடுகள் மூலம் சாதித்தல்.
- தனது செயல்முறை மற்றும் தொழில்நுட்பங்களில் தொடர்ச்சியான முன்னேற்றத்தை உட்புகுத்தி நிலையான தரம், உகந்த ஆற்றல் நுகர்வு, கற்றுச்சூழல் பாதுகாப்பு, தொழில்சார் சுகாதாரம் மற்றும் பாதுகாப்பு மேலாண்மை அமைப்பு ஆகியவற்றின் நிலைத்தன்மையை உறுதிசெய்தல்.
- ≽ அனைத்து சட்டங்கள் மற்றும் தேவையான பிற விதிமுறைகளை கடைப்பிடித்தல்.
- தனது பல்வேறு இயக்க நிலையங்களின் சுற்றுச்சூழல் செயல்திறன் மற்றும் சுற்றுச்சூழலுக்கு தேவையான ஆய்வுகள், எதிர் நடவடிக்கைகள் மற்றும் இணக்கம் அல்லாத செயல்கள் ஏதேனும் ஏற்படின் அதை அறிக்கையாக இயக்குனர் குழுமம் மற்றும் பங்குதாரர்களுக்கு சமர்ப்பிக்க பிரத்யேக சுற்றுச்சூழல் மேலாண்மை குழுமத்தை உருவாக்கி அதன் மூலம் சுற்றுச்சூழல் தொடர்பான அனைத்துச் சட்டங்கள் மற்றும் விதிமுறைகளை கடைபிடித்தல்.
- மேம்பட்ட தொழில்நுட்பம் மற்றும் நடைமுறை அம்சங்களில் முன்னேற்றம் ஆகியவற்றின் மூலம் தண்ணீர், ஆற்றல் பயன்பாடு மற்றும் இதர இயற்கை ஆதார வளங்களை சரியான முறையில் உபயோகிக்க தேவையான உந்துதலை ஏற்படுத்துதல்.
- > கழிவுகளை குறைத்தல் மற்றும் மறுசுழற்சி/மறுஉபயோகத்தை அதிகரித்தல்.
- பணிகள் தொடர்பான காயங்கள் மற்றும் உடல்நலக்குறைவைத் தடுப்பதற்கு பாதுகாப்பான மற்றும் ஆரோக்கியமான பணிச்சூழலை ஏற்படுத்துதல்.
- கறிப்பிட்ட கால இடைவெளியில் பாதுகாப்பு தணிக்கை மற்றும் ஆபத்து மதிப்பீடுகளை நடத்துவதின் மூலம் அபாயகரமான சூழலை நீக்குவதும் தொழில்சார் சுகாதார மற்றும் பாதுகாப்பு குறி த்த அபாய நேர்வுகளைக் குறைத்தல்.
- தொழில்சார் சுகாதார மற்றும் பாதுகாப்பு மேலாண்மை முறையைத் தக்கவைத்துக்கொள்வதில் தொழிலாளர்கள் அல்லது தொழிலாளர் பிரதிநிதிகளின் ஆலோசனை மற்றும் பங்களிப்பை உறுதிசெய்தல்
- வாடிக்கையாளர்களின் திருப்தியை அதிகரிக்கும் வகையில் தரமான பொருட்களை உகந்த விலையில் உரிய நேரத்தில் அவர்களிடம் விநியோகித்தல்.
- நிறுவனத்தின் ஒருங்கிணைந்த மேலாண்மை அமைப்பினை மேம்படுத்த தேவையான பங்களிப்பு மற்றும் செயல்முறைகளை கடைப்பிடிக்க தேவையான அதிகாரங்களை ஊழியர்களுக்கு அளித்தல்.
- சிறப்பான உற்பத்தி மாதிரியை அடிப்படையாக கொண்டு தரம், ஆற்றல், சுற்றுச்சூழல், சுகாதாரம் மற்றம் பாதுகாப்பு ஆகியவற்றை பேணுவதற்கான தேவைகளை தனது வணிகரீதியான தீர்மானங்களுடன் ஒருங்கிணைத்தல்.

சு. சிவசண்முக ராஜா இ.ஆ. ப., மேலாண்மை இயக்குநர்

வெளியீடு எண்: 02 நவம்பர் 16, 2020

CER Expenditure from April' 2023 to September' 2023					
	I. Socio Economic Development and Security				
S.No.	Activity	Actual Expense in Rs.	Photo		
1	Handed over a DD for Rs.11 lakhs to BDO, Thogaimalai (as public contribution) towards formation of Tar road at Pathripatti Panchayat on Tamilnadu Govt's Self Sufficiency Scheme	11,00,000.00			
		II.	Cultural & Heritage		
1	Provided Kambu & Solam to Peacocks Sanctuary at Arulmigu Sri Subramaniya swamy Temple, Viralimalai, Pudukottai District	18,800.00			
	Total	11,18,800.00			

#### Status of Environment Management Plan of EIA study report

#### I. AIR QUALITY MANAGEMENT PLAN

#### EMP 1

Due to utilization of the high calorific imported coal with sulphur content less than 1%, the specific SO2 emission rate from the proposed facility will be two to three times lower than that of the conventional co- generation power plants that are operated on Indian coal. Dedicated Electrostatic Precipitators (ESP) will be installed for control of Particulate Matter (PM) emissions from the proposed boiler in the captive power plant. ESP will be designed to achieve emission norms of 30 mg/Nm3 as per MoEF&CC January 2017regulations.

#### Compliance

As the scope on installation of new power boiler is under Phase-2 of expansion, the ESP will be installed along with the new boiler.

#### EMP 2

A dry limestone/ lime sludge injection system shall be installed to meet the SO2 emissions. Lime stone demand will be about 4 T/T of SO2 emissions from the facility and additional fly ash to the tune of 3 T/T of SO2 will be generated from the proposed power boiler.

#### **Compliance**

As the scope on installation of new power boiler is under Phase-2 of expansion, the dry limestone/ lime sludge injection system will be installed along with the new boiler.

#### EMP 3

A 100 m tall stack will be installed to disperse the stack gases as per the minimum stack height norms. The predicted ground level concentrations will be complying with the NAAQ Standards.

#### Compliance

As the scope on installation of new power boiler is under Phase-2 of expansion, the 100 m tall stack will be installed along with the new boiler.

#### EMP 4

Stacks of height 90 m and 35 m will be installed for chemical recovery boiler and lime kiln respectively as per the minimum stack height norms.

#### **Compliance**

Stack of height 90 m & stack of height 54.8 m were installed for chemical recovery boiler & Lime Kiln stack respectively.

#### Chemical Recovery Boiler Stack – 90 m height

#### Lime Kiln Stack – 54.8 m height





#### EMP 5

Like the existing boiler, continuous online stack emission monitoring unit will be installed to monitor Particulate Matter, SO2 and NOx emissions for the proposed boiler.

#### Compliance

TNPL has provided Continuous online stack emission monitoring system for measuring Particulate Matter, SO2 and NOx emissions for the existing Power boiler, Recovery Boiler & Lime Kiln which are in operation. The same facility will be provided for the proposed boiler which will be installed under phase II of MEP.

#### II. FUGITIVE EMISSIONS CONTROL MANAGEMENT

#### <u>EMP 1</u>

Existing Closed belt conveyors will be used to transport coal from stock yard to boiler house.

#### **Compliance**

Closed belt conveyors are being used to transport coal from stock yard to existing boiler which is in operation. The same facility will be extended for the proposed power boiler, which will be installed under part of MEP Phase II.



Closed hoods for coal conveyors



#### <u>EMP 2</u>

Existing Closed belt conveyors will be extended up to the new boiler.

#### **Compliance**

Closed belt conveyors has been provided for the existing boiler which will be extended for the proposed boiler under Phase II of MEP.



#### **EMP 3**

Similar to the existing operations, ash will be transported by closed bulkers to potential users.

#### **Compliance**

The same facility will be extended for the proposed boiler under Phase II of MEP.



#### EMP 4

Adequate numbers of water sprinkling system at coal storage yard has been already installed and intensity of the water sprinkling will be done based on the amount of coal handled and meteorological conditions.

#### Compliance

Adequate numbers of water sprinkling system at coal storage yard is already installed. Based on the requirement, additional water sprinklers will be extended in phase II of expansion.



#### **EMP 5**

Unloading of coal trucks will be carried out with proper care, avoiding dropping of the materials from height. It is advisable to moisten the material by sprinkling water while unloading, handling and during storage.

#### Compliance

This practice is being followed from the inception of the unit and shall be continued on post MEP implementation also.



#### <u>EMP 6</u>

Existing Mobile road dust cleaning machines will be employed to collect coal fines if any.

#### **Compliance**

Mobile road dust cleaning machines is employed to collect coal fines.



#### <u>EMP 7</u>

High efficiency bag filters are installed at the coal yard, coal transfer points and preparation yards for the control of dust.

#### **Compliance**

Bag filters are installed in the Dust Extraction system to control dust on Coal Handling Plant.



#### **EMP 8**

Adequately designed greenbelt is developed for further control the fugitive emissions.

#### **Compliance**

The required greenbelt is designed as per the norms of CPCB and established well within the plant area. 1,28,880 no. of green belt trees with different species were planted in 131.01 acres to effectively control fugitive emission which covers 35 % of the total plant area developed and being maintained.





#### III. MANAGEMENT OF NON CONDENSABLE GASES (NCG) EMISSION

#### **EMP 1 to 3**

Emissions from digester relief and digester pulp discharge tanks will be connected to water striping in the scrubber and the non- condensable gases will be fired in the lime kiln. A lime kiln of 250 TPD capacity is proposed to be installed under the MEP. Emissions from digester tank relief tanks will be connected to lime kiln Emissions from evaporator condenser, will be connected to lime kiln.

#### **Compliance**

#### **BRIEF WRITE-UP ON DNCG & CNCG COLLECTION AND INCINERATION**

As part of Mill Expansion Plan, TNPL installed a 400 TPD Hardwood Pulp mill, along with connected Chemical Recovery System. During the Pulping process, certain reduced Sulphur based Non-Condensable Gases (NCG) is generated which will create odorous environment, in and around the mill area. In order to have an odour free environment, a state of the art technology has been considered right at the concept stage of the project.

Accordingly, a full fledged NCG collection and incineration system has been installed which plays a vital role in helping the pulp mill meet strict environmental regulations as well as being a good neighbour in the surrounding community.

There are two main sources of NCG in a pulping process. Some sources emit a small, but highly concentrated amount (Concentrated NCG or CNCG), while others emit large volumes with low concentrations (Dilute NCG or DNCG). During the process, Dilute NCG is generated in the Pulp mill digester and the Black liquor storage areas, while Concentrated

NCG is generated in the Black liquor evaporation process. The DNCG and CNCG are collected and incinerated through exclusive systems, as described below:

#### **CNCG & Methanol Generation and incineration**

The foul condensate from the Black liquor Evaporation plant is stripped through LP steam or first effect vapour. After stripping the Foul condensate is received as "A" condensate, which is recycled back in the process and the stripper outlet gas (SOG) is further stripped through LP steam in a methanol column. From the stripper column, CNCG is generated and the methanol is recovered in liquid form.

Methanol generated is stored in a storage tank and then used as fired in the Lime Kiln.

In addition to the CNCG generated from the SOG stripping of Evaporation plant, the gases emanating from Vacuum pump shall also be collected and transferred to Lime Kiln through a steam ejector, for firing.

In case of Lime Kiln stoppage, the CNCG is routed through a flare system, where the gases are fired.

#### Collection and incineration of DNCG

All storage tanks from Evaporator plant (Weak Black Liquor, Spill Liquor, Condensate storage tanks, HBL tank) vents are connected through a flap valve to collect the DNCG. The DNCG shall be scrubbed with cooling water and then through a blower it is sent to the Chemical Recovery Boiler.

Similarly, all storage tanks from Recausticising plant (White Liquor tanks, Green Liquor tanks, Dregs tanks, Weak white liquor tank, Dilution tank, wash water tank) vents are connected to collect the DNCG, for subsequent firing in the Chemical Recovery Boiler.

The Pulp mill has a separate collection system for the DNCG gases from the Digesters, Pulp Discharge tank and the Black liquor storage tanks. The DNCG system forms part of the Hardwood digester. The system delivers the DNCG after necessary scrubbing and joins the DNCG collected from the Evaporator and Recausticizing area, and fired into the Chemical Recovery Boiler.

DNCG forms part of the secondary air in the Recovery Boiler. A DNCG fan in the Recovery Boiler receives gases from all the above areas and the gas pressure is raised to ensure entry of the DNCG without any interruption through the Secondary air duct. The DNCG fan speed is controlled by a Variable Frequency drive.

DNCG fan delivery first flows to the DNCG gas preheater. Gas is heated by both LP and MP steam gas preheater. Gas is preheated to match the secondary air duct temperature of 130-150 Deg C. After preheating gases are led to the secondary air duct.

### EMP 4

Vents from bleaching tanks will be connected to a alkali scrubber.

### **Compliance**

Vents from bleaching tanks were connected to a alkali scrubber.





### **IV. NOISE MANGEMENT PLAN**

### <u>EMP 1</u>

Steam turbine and turbo-generator in the co-generation plants will be provided with acoustic insulation and, also, will be placed in a closed room.

### **Compliance**

Turbo – generator is provided with acoustic insulation and placed in closed room as shown.







### <u>EMP 2</u>

Appropriate noise barriers/shields, silencers etc will be provided in the equipment, wherever feasible and necessary. As far as possible, noise emanating from noisy equipment shall be adequately attenuated by enclosures, insulations etc.

### **Compliance**

Noise barriers/ shields, silencers etc., are installed in the system.



### <u>EMP 3</u>

Ear plugs are being provided to workmen working near high noise generating sources.

### **Compliance**

Ear Plugs are provided to the persons working near high noise generating area.



### <u>EMP 4</u>

The existing greenbelt around the plant will further attenuate noise levels.

### **Compliance**

Totally 8,11,783 nos. of trees are planted to reduce the impact of noise level.



# V. WATER AND WASTEWATER MANAGEMENT A) WATER CONSERVATION

### <u>EMP 1</u>

Fresh Water for the proposed MEP will be sourced from River Cauvery through collector wells with the permission already obtained from State Government. Water reuse and recycling will be carried out in the plant to maintain water consumption less than 25 m3/t of Paper.

### Compliance

Fresh water is being sourced from river Cauvery. Necessary approval is obtained from state government.

After Phase – 1 of MEP, around 1000 m3/day of water is recycled and reused in the process. Further specific consumption less than 25 m3/t of paper will be achieved after installation of Paper Machine of 165000 TPA which will be installed in Phase-2.

#### EMP 2

The fresh water requirement for the mill is about 7,700 m3/day which is equivalent to around 13 m3/t of paper with respect to current paper production. As a part of MEP further water conservation and recycling programs will be implemented to achieve specific water consumption less than 25m3/t post MEP with total fresh water consumption of about 20,700 m3/day. Continuous efforts shall be made to reduce the water consumption and thereby to reduce the waste water generation.

### **Compliance**

The specific water consumption of 25m3/t post MEP will be achieved in Phase-2 MEP expansion. Further, TNPL is always taking initiative and implementing water conservation projects to achieve the best result in the pulp and paper segment.

### **B) WASTE WATER TREATMENT AND MANAGEMENT**

### <u>EMP 1</u>

Wastewater generated from the plant will be treated in a primary clarifier followed by extended aeration biological treatment plant and the treated effluent will meet the CPCB prescribed irrigation discharge standards. Total estimated wastewater quantity from the facility will be in the order of 18,000 m3/day during the post project scenario. It is proposed to augment the existing ETP to accommodate the additional wastewater to be generated from the expansion activities. The existing wastewater treatment plant can handle 9,000 m3/day of wastewater. It is proposed to augment the existing ETP to treat 12,000 m3/day board machine/ paper machine effluents. A separate ETP for treating for treating wastewater from hardwood pulp mill, chemical recovery and power plant effluents with a capacity of 15,000 m3/day is proposed to be installed. After MEP Project, total ETP capacity shall be 27,000 m3/day for handling wastewater from existing operations and proposed project operations.

### **Compliance**

After MEP Phase – I, the waste water generation is around 9480 m3/day. A new ETP of capacity 15MLD is installed to handle the waste water generated from Pulp mill and Chemical Recovery plant. Existing ETP is proposed to be augmented in Phase – II of expansion to handle around 12,000 m3/day of waste water from existing board machine and proposed paper machine.

### New Waste Water Treatment Plant- 15 MLD



### <u>EMP 2</u>

Dedicated STP is already installed for the colony and if required additional STP's will be installed and the treated water will be reused for green cover and horticulture applications.

#### **Compliance**

Dedicated STP is already installed and in operation in colony area.

The following are the STP details installed in Paper Board Plant and in Captive Co- Gen Plant.

Name of the Treatment Unit	No. of Units	Dimension	Area			
STP's & Septic Tank Covered under Paper Board Unit						
STP #1 (Board machine)	1	20 KLD	Existing			
STP #2 (Guest House)	1	20 KLD	Existing			
STP#3(Pulpmill,FH area)	1	10 KLD	Phase – 1. Installation completed.			
STP#4 (Admin area) - Expansion	1	20 KLD	Phase – 1. Installation completed.			
Total STPs	4	70 KLD	-			
Septic Tank #1 @ Stores Dept	1	4.02mx1.32mx2.53	Phase – 1. Installation completed.			
STP's Covered under Captive Co-Gen Plant						
Captive Power Plant area (STP#1) - Existing	1	10 KLD	Existing			

The entire STP outlet, after treatment will be utilized for on land gardening.

### **C) TREATED WASTE WATER MANAGEMENT**

### <u>EMP 1</u>

After utilization of considerable quantity of treated wastewater in the plant, the excess, unutilized treated wastewater will be used for irrigation/greenbelt/green cover development. Combined treated wastewater will be complying with the discharge standards prescribed by CPCB/SPCB for discharge for irrigation. As the areas around the plant are only with rain fed cultivation, farmers are expected to be benefited by using the treated wastewater for irrigation, as is being practiced currently in the Unit # 1 & 2. TNPL Unit 2 has already covered 650 acres of land for green development using existing treated wastewater.

### **Compliance**

Total green belt area of is 674.18 acres out of which 623.89 acres under drip irrigation project with treated effluent water. Total Green belt Plantation is systematically planned and

established by planting 8,11,783 no. of tree saplings consisting various native and fast growing evergreen forest species. Treated effluent water is being used as prescribed by CPCB/SPCB for discharge for irrigation through drip system. Measures are taken by meticulous planning and execution of the irrigation schemes for effective utilization of treated effluent water the development of the plantation area.



# STATUS OF IMPLEMENTATION OF CREP ACTION POINTS AS EVOLVED BY CPCB

S.NO	RESPONSIBILITY	IMPLEMENTATION SCHEDULE	STATUS OF COMPLIANCE
01.	Discharge of AOX kg/tonne of paper	AOX 1.5 Kg/tonne of paper within 2 years  AOX 1.0 Kg/tonne of paper within 5 years	The unit has obtained CTO for MEP Expansion comprising Pulpmill, Soda Recovery Plant & Lime Kiln on 15.07.2022. AOX is being maintained within 1.5Kg/tonne of Paper.
02.	Installation of lime kiln	Within 4 years	Lime Kiln with lime sludge reburning of capacity 250TPD is installed along with MEP and is in operation.
03.	Waste water discharge cu. M / tonne of paper	Less than 140 Cu. M / tonne of paper within 2 years. Less than 120 Cu. M / tonne in 4 years for units installed before 1992. Less than 100 Cu. M / tonne of paper per units installed after 1992.	The average waste water discharge per ton of paper production is maintained around 11 m <sup>3</sup> /Mt of paper produced.
04.	Odour control by burning the reduced sulfur emissions in the boiler/lime-kiln	Installation of odour control system within 4 years.	A full fledged Odour control system installed with collection and incineration of DNCG and CNCG firing is in place.
05.	Utilization of treated effluent for irrigation	Utilization of treated effluent for irrigation wherever possible	The treated effluent is fully utilized to irrigate 6.63 Lakhs of tree saplings in 674.64 Acres earmarked for green belt development including housing colony located in the Mondipatti Village and additional lands located in K. Periyapatti and Chettichatram through Drip irrigation.
06.	Color removal from the effluent	Indian Paper Manufacturers Association to take up project with Central Pulp & Paper Research Institute	The Raw effluent from the Pulpmill and Board Machine being treated in the Effluent Treatment plant consisting of Physico Chemical Treatment, Biological Treatment and followed by Dissolved Air Floatation Process (DAF) for colour reduction in the treated Effluent.

THE HINDU TIRUCHIRAPALLI TUESDAY, MAY 28, 2019 

TAMILNADU NEWSPRINT AND PAPERS LIMITED
Unit II – Mondipatti, Manapparai Taluk, Trichy District,
Tamil Nadu, INDIA
Prione: 04332-261600 e-Mail: pmd@tnpl.co.in

### **PUBLIC NOTICE**

This is to inform that the Ministry of Environment, Forest and Climate Change, New Delhi (MoEFCC) has accorded Environmental clearance for implementation of the Mill Expansion Plan of Tamil Nadu Newsprint and Papers Limited, in Mondipatti, Manapparai Taluk, vide its Order dated 04th April 2019.

Copy of the clearance letter is available with the Tamil Nadu Pollution Control Board (TNPCB) and may also be seen at the Website of TNPL www.tnpl.com.

**EXECUTIVE DIRECTOR (OPERATIONS)** 

DIPR/440/Display/2019

# தினத்தந்தி

28-5-2019

ுத்தது தமிழ்நாடு செய்தித்தாள் மற்றும் காகித நிறுவனம் அகை 1 — கொண்கும்ம் ஒ. மணம்மறை வட்டம், திருச்சி மடைட்டம்.

தார்கள் தார்நாகம், தெரியார் தொகைபோர் என் 64332-261600 மின் அத்தன் : DING@UDL.CO.W

திருச்சி மாவட்டம், மணப்பாறை வட்டம், மொண்டிப்பட்டி திராமத்தில் அமைந்துள்ள தமிழ்நாடு செய்தித்தாள் காகித நிறுவன அலகு 11 ன் ஆலை விரிவாக்கத் திட்டத்தை நிறுவ, "மத்திய கற்றுச்சூழல், வனம் மற்றும் பருவநிலை மாற்ற அமைச்சகம், பது தில்லி (MoEFCC New Delhi)", தனது 4 ஏப்ரல் 2019 தேதியிட்ட ஆணை ழூலம் சுற்றுச்சூழல் அனுமதி வழங்கியுள்ளது என அறிவிக்கப்படுகிறது. இழற்படி ஆணையின் நகல், தமிழ்நாடு மாக் கட்டுப்பாடு வாரியத்தில் இடைக்கப் பெறும் மற்றும் சாகித நிறுவனத்தின் இணையதளமான www.tnpl.com லும் பார்த்து கொள்ளலாம்.

செயல் இயக்குநர் (இயக்கம்)



NATIONAL AWARD

FOR EXCELLENCE IN CORPORATE GOVERNANCE

ICSI

# Tamil Nadu Newsprint and Papers Limited

( A Government of Tamil Nadu Enterprise)

Mondipatti, K.Periyapatti Post, Manapparai Taluk - 621 306

Tiruchirappalli District, Tamil Nadu, India.

Phone: 04332 - 261600 Purchase: 04332 - 265102 Mktg: 04332 - 265265

HR : 04332 - 265275 Cell : 94890 12793 Grams : NEWSPRINT

ENV/TNPCB/UNIT II/53 21st May, 2019

The Block Development officer (BDO), Union Office, Manapparai Taluk, Trichy Dt.

Sir,

SUB: Mill Expansion Plan - Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities by TNPL, Unit - II - Intimation on receipt of Environmental Clearance reg.

REF: F.No. J-11011/172/2017-IA-II(I) dated 04.04.2019.

We would like to inform that Ministry of Environment, Forest and Climate Change (MOEF&CC) has accorded "Environment Clearance" vide reference cited above for Mill Expansion Plan - Installation of Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant and utilities at Tamilnadu Newsprint and Papers Limited, Unit - 2 located in Mondipatti Village, Manapparai Taluk, Trichy District.

A copy of Environmental Clearance is enclosed for your information.

Thanking you

Yours Faithfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(KUSHAL PAL SINGH)

CHIEF GENERAL MANAGER (BOARD PLANT)

வட்டார வள்ர்ச்சி அலுவலர் (ஊராட்சி) மணப்பாறை

Corporate Office: 67, Mount Road, Guindy, Chennai - 600 032.

TNPL - The Corporate Identity Number: L 22121 TN 1979 PL C 007799

Fax: 044 - 22350834 / 22354614, Phone: 044 - 22354415 / 16 / 18, 22301094 - 97,



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The President, Chithanatham Panchayat, Chithanatham, Manapparai Taluk, Trichy Dt.

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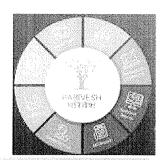
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# Photograph of Electronic Display board for Real Time Monitoring Placed at Entrance Gate of TNPL UNIT-II



# EC Conditions Six Monthly Compliance Report

(by Project Proponent)



Proposal No: IA/TN/IND/88943/2013

## 1. Name of the Entity / Corporate Office:

File No. :	J-11011/172/2017- IA.II(I)	Proposal Name :	Mill Expansion Plan of Unit-2, Installation of Paper Machine, Pulp Mill, Chemical Recovery Island, and Augmentation of Co-Generation Plant and utilities at TNPL, Unit 2, Mondipatti, Trichy.
Date Of EC.:	04 Apr 2019	EC Letter :	<b>¥</b> PDF
Name of the Entity / Corporate Office :	TAMIL NADU NEWSPRINT AND PAPERS LIMITED	Email Address :	varadarajan.sj@tnpl.co.in
Address:	TNPL, Unit -2, Mondipatti Village, Manaparai Taluk, Tiruchirapalli District	Mobile No :	9442191445

## 2. Proponent Details:

Proponent Name:	Varadarajan	Designation:	DGM
Telephone No :	0432-4275331	Mobile No :	+91 9442191445
Fax No:	0432-	Email Address :	varadarajan.sj@tnpl.co.in
Website :		Pin Code :	621306
State:	Tamil Nadu	District :	Tiruchirappalli
Village/Town:			

## 3. <u>Compliance Letter/Report (Proponent)</u>:

Compliance Period :	2023 / 01 Dec (01 April - 30 Sep)	Compliance Submission Date:	02 Mar 2023 14:41:49:777
Remarks:	Compliance report-EC F.NO.J-11011/172/2017-IA-II(I) dtd 04.04.2019 Installation Paper Machine, Pulp Mill, Chemical Recovery Island and Augmentation of Co-Generation Plant& utilities at TNPL, Unit 2		
Site Visit Report :	N/A	Site Visit Date :	N/A
ATR Report :	N/A	ATR Date :	N/A
•		Additional Remarks (If Any) :	

## 4. <u>Summary Status of Compliance</u>:

	· · · · · · · · · · · · · · · · · · ·
Total Condition :	62

Complied :	43	Being Complied :	15
Not Complied :	0	Partially Complied :	1
Agreed to Comply :	3		

## 5. <u>Details of Production and Project Area</u>:

	of Commencement of ct/Activity:	08 Nov 2021	Project Area as Per EC Granted (In Case of Mi Lease):		In Case of Mine
Actual Lease)	Project Area(In Case of Mine	0			
PRODUC		PRODUCTIO	N CAPACITY :	:	
S.No	Name of the Product	U	nits	As per EC granted	Production during last financial year
1	Paper Board	Tons per Annum (TPA)		200000	183769.1
2	Power	MW		50	15.60

## 6. <u>Specific Conditions (Proponent)</u>:

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	The Project proponent shall take necessary steps for control of odour	Complied	TNPL has initiated a full fledged Odour Control system to control Odour. The Details of the Odour control system present is attached as Annexure.	PDF	
2	The Project proponent shall adhere to Zero Liquid Discharge	Complied	TNPL Unit II has developed green belt of 675 acres by planting 6.63 Lakhs trees in own premises & maintaining the same using treated effluent discharged from operations & its being continued		

## 7. <u>General Conditions (Proponent)</u>:

S.No	Condition	Self Declaration	Remarks / Reason	Supporting Documents	Observation of IRO
1	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	Complied	Housing for Construction labourers is provided with all necessary infrastructure and facilities Attached photos as annexure XX		

				•	•
2	The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.	Complied	Used Oil, Grease and other Hazardous Waste are being disposed to authorized recyclers. Quantity of waste disposed for review period attached as Annexure		
3	The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.	Being Complied	GHG inventory for the plant is available. Programme for reduction of the same including carbon sequestration including plantation is being under preparation.	N/A	
4	The project proponent shall practice rainwater harvesting to maximum possible extent.	Complied	RWH facilities available in the plant is attached as Annexure	**************************************	
5	Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.	Being Complied	TNPL have ISO 14001-2015 certification Environment Management System. Auditing of Environmental aspects and impacts of each process activity being done. Significant study is being done and accordingly	PDF	
	Black Liquor shall be separately processed for recovery of energy and chemical in a Chemical Recovery Process.	Complied	Generated black liquor is incinerated in Recovery Boiler to recover cooking chemicals in addition to 20MW generation.	N/A	
7	The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Complied	The summary of Continuous and manual Air Quality survey reports for the review period are submitted herewith. Annexure V attached for details.		
8	The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells	Being Complied	Ground Water survey in 09 points are being carried out once in six months through independent labs	J PDF	

	in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.		possessing valid accreditation Attached ROA of the review period as Annexure XIII	
9	100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office. (in case of CPP)	Being Complied	The entire fly ash is being utilized in TNPL Mini Cement plant for cement production. Quanti of Flyash disposal to cement plant attached as Annexure.	
10	All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Pulp and Paper plants shall be implemented.	Being Complied	CREP guidelines issued by CPCB for large pulp and Paper Mills are being implemented and maintained.  Annexure attached.	
11	The project proponent shall make efforts to minimize water consumption in the plant complex be segregation of used water, practicing cascade use and by recycling treated water.	Being Complied	TNPL is always implementing water conservation projects to achieve best result in Pulp & Paper segment. Water consumption for board Production is also reduced to 8.50 M3/MT from 10.02 M3/MT.	N/A
12	Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.	Complied	Road sweeping machine is being utilized to clean roads. Vacuum cleaners are used to clean shop floors and roofs Annexure IX photograph of road sweeping machine in operation attached.	PO.
13	The company shall install Oxygen Delignification (ODL) Plant and shall maintain AOX below 1 kg/tonne of paper production.	Complied	Two stage ODL installed and in operation from July'22. AOX is maintained about 0.0050 kg/Ton of paper. Sample Report attached	POT
14	Water meters shall be provided at the inlet to all unit processes in the plant.	Complied	Water maters are provided at the inlet of Pulpmill, SRP, Power Boiler, Waste paper Processing Plant & Board Machine areas.	N/A
15	Occupational health surveillance of the workers	Complied	OHC is provided with required	POF

	shall be done on a regular basis and records maintained as per the Factories Act.	i	infrastructure and functioning 02 resident doctors, 05 nurses and 02 supporting staff and maintaining health records as per Factory Act. Details given as Annexure		
16	Ensure that there is no black liquor spillage in the area of pulp mill, no use of elemental chlorine for bleaching in mill, installation of hypo preparation plant.		TNPL ensures no black liquor spillage & no use of elemental chlorine for bleaching in pulpmill.Details attached as Annexure.	**	
17	Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.	Complied	Every year, we submit proposed activities and obtained approval from the board of directors to carry out CER activities. Separate CER account maintained and not being diverted for any other purpose.	PDI	
18	The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspaper of the District or Status, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project porponent's website permanently.	Complied	Public notice given in two local newspapers dated 28.05.2019. A copy of the same is attached for reference vide Annexure XXIV.	201	
19	The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.	Complied	TNPL is regularly submitting the Form V to the relevant authorities . Latest Form V attached as Annexure.	905	
20	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their	Being Complied	Hard and soft copies of periodical EC compliance reports including monitoring data are being	¥ ror	

21	Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.	Complied	submitted to respective authorities. Periodical submission details enclosed as Annexure - XXVI.  Details of APC measures provided to control fugitive emissions are submitted herewith. Annexure VI attached.		
22	Tyre washing facilities shall be provided at the entrance of the plant gate(s).	Complied	Tyre washing facility has been provided at the entrance of the gate.Photos attached.	, de la constante de la consta	
23	The project proponent shall provide the ETP to meet the standards prescribed in vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time.	Complied	The ROA of the analysis report of treated effluent carried out by TNPCB reveals that the treated effluent quality is within norms prescribed by Board. Copies of ROA enclosed.	25	
24	The project proponent shall install 24x7 continuous effluent monitoring with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (P	Complied	Continuous effluent monitoring Systems (CEFMS) are installed and in operation. Periodical calibration are carried out for CEFMS. Photograph of CEFMS attached as Annexure XII	≯£	
25	Pollution control system in the pulp and paper plant shall be provided as per the CREP Guidelines of CPCB.	Complied	CREP guidelines issued by CPCB for large pulp and Paper Mills are being implemented and maintained. Annexure VIII attached.	**	
26	The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.	Complied	Strictly complying with TNPCB conditions. CTO (Expansion) for the part of MEP obtained on 15/07/22 and copy enclosed	¥201	

27	A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.	Complied	A separate Environmental is available and the same is enclosed A copy of Environmental Cell is attached as Annexure XXII		
28	The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.	Being Complied	The summary of Continuous and manual effluent Quality survey reports for the review period are submitted herewith as Annexure	POF	
29	The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.	Complied	TNPL abides to this condition . Screen shot of reports submitted online is attached.	Por	
30	The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and the systems be calibrated according to equipment supplier's specification throug	Complied	CEMS facility available for stacks of Power Boilers, Chemical Recovery Boiler and Lime Kiln which are linked to TNPCB and CPCB servers. Calibration report attached as Annexure.		
31	Garland drains and collection pits shall be provided for each stock pile to arrest the run off in the event of heavy rains and to check the water pollution due to surface run off.	Complied	Raw material Pulp & chemicals are stored only in a closed Godown.	N/A	·
32	The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM10 and PM2.5 in reference to PM emission, and SO2 and NOX in reference to SO2 and NOX emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of	Partially Complied	Already one station has been installed and in operation. Installation of additional stations are being taken up based on GLC study.	N/A	

***************************************	1200 each), covering upwind				
33	and downwind directions.  The project proponent shall install high volume, low concentration NCG collection & destruction system to mitigate all malodorous gases emitted.	Being Complied	All the requisite systems to control NCG and malodorous gases installed and being kept in operation. Detailed report submitted herewith. Annexure attached.	ne.	
34	The project proponent shall monitor the criteria pollutants level namely; PM10, SO2, NOX (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.	Being Complied	Electronic display board depicting Real time emission monitoring data has been installed in public domain, viz., near entrance gate .Photograph attached as Annexure XXVII		
35	The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.	Being Complied	The CER project has been complied with the provisions contained in this Ministry's OM vide F.No. 22-65/2017	N/A	
36	The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.	Complied	Date of financial closure is Nov'2019. CTE and CTO were received during 11/08/2021 and 15/07/2022 and subsequently commercial production commenced.	**************************************	
37	The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.	Complied	Obtained permission from District Collector, Trichy for drawl of water from River Kavery with a validity till 31/10/2025. Copy of permission as Annexure II	ror ·	
38	The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.	Agreed to Comply	TNPL abides to this condition .Detailed EIA/EMP Report attached as Annexure.	POF	
39	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry	Being Complied	So far, only part of MEP proposals implemented. Balance will be	N/A	

	of Environment, Forests and Climate Change (MoEF&CC).		taken up in due		
40	The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognized under Environment (Protection) Act, 1986.	Being Complied	Fugitive emissions in V points are carried out through independent labs possessing valid accreditation. Attached ROA of review period as Annexure IV	229	
41	Sewage treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.	Being Complied	STP: 4 Nos.for Board Plant and One No. for Power Plant are installed and in operation. ROA of review period as Annexure XV	·	
42	The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.	Complied	Fresh authorization application submitted is under scrutiny of TNPCB as the prevailing order got expired on Jun'22	FOI	
43	In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.	Complied	TNPL abides to this condition	N/A	·
11	Ensure that no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE in the Chemical recovery process directly to ETP.	Agreed to Comply	TNPL will ensure that no foam spillages in chemical recovery plant. Foul condensate generated from Multiple Effect Evaporators will not be discharged to ETP. Details attached as Annexure.		
45	The proponent shall follow International Standards of safety for CIO2 generation and storage system, and ozone plant, and certification on regular basis may be submitted. Provision for adequate safety for personnel in case of any accidental leakage should be in place.	Agreed to Comply	International Standards of safety for CIO2 generation and storage system will be followed and adequate safety for personnel will be provided in case of accidental leakage. Training Record annexed.	PDF	
46	Elemental Chlorine Free (ECF) technology shall be used and lime kiln shall be installed to manage lime sludge.	Complied	ECF technology implemented. Lime Kiln installed and is in operation.	POT	

		Photograph of HW plant and Lime kiln attached as Annexure XI.		
Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.	Complied	No Raw materials are stored in an open area, Further Wind shelter fence are provided in the North-East direction near the raw material stock piles. Relevant Photograph attached as Annexure.		
The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.	Complied	Complied with. Acknowledgement from the respective offices are submitted as Annexure XXV	PDF	
Emissions shall be controlled from chemical recovery section through primary and secondary venturi scrubbers.	Complied	Primary and secondary venturi scrubbers installed to control emissions from chemical recovery boiler.	PDF	
The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/viola of the environmental / forest / wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/ forest / wildlife norms / conditions and / or sharehold	Complied	A well laid down Environmental Policy has been developed as part of Integrated Management System which is duly approved by Managing Director is in place Attached as Annexure XXI.	ebF.	
The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board / Committee.	Complied	Obtained CTO for both Board plant and Power Plant for part of implemented Mill Expansion on 15/07/22 with a validity till 31/03/2027. Copies of CTO	POI	
	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.  Emissions shall be controlled from chemical recovery section through primary and secondary venturi scrubbers.  The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/viola of the environmental / forest / wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental/ forest / wildlife norms / conditions and / or sharehold  The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board	The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.  Emissions shall be controlled from chemical recovery section through primary and secondary venturi scrubbers.  The company shall have a well laid down environmental policy duly approve by the Board of Directors. 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The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayas and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.  Emissions shall be controlled from chemical recovery section through primary and secondary venturi scrubbers.  The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy douly approve by the Board of Directors. The environmental of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or sharehold  The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1974 from the concerned state Pollution Control Board 31/03/2027.	Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.  The copies of the environmental clearance shall be submitted by the project proponents to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.  Emissions shall be controlled from chemical recovery section through primary and secondary venturi scrubbers.  The company shall have a well laid down environmental policy duly approve by the Board of Directors. 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The company shall have defined system of reporting infringements / deviation / Voilation of the environmental / forest / wildlife norms / conditions and / or sharehold  The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1981 and the Water (Porevention & Control of Pollution) Act, 1981 and the Water (Porevention & Control of Pollution) Act, 1981 and the Water (Porevention & Control of Pollution) Act, 1981 and the Water (Porevention & Control of Pollution) Act, 1981 and the Water (Porevention

52	Emergency preparedness	Complied	Onsite	\$4.50	
	plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.	Compaeu	Emergency Preparedness plan duly approved by from Director of Industrial Safety and Health on 27/07/2022 is enclosed.		
53	Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of Six-Monthly compliance report.	Complied	ROA of the Noise level monitoring during survey period is submitted as Annexure XVII.	PDF	
54	The ambient noise levels should conform to the standards prescribed under E(P)A rules, 1986 viz 75dB(A) during day time and 70dB(A) during night time.	Complied	Ambient Noise survey report conform to the prescribed standard as per survey report attached Annexure XVII.		
55	Provide LED lights in their offices and residential areas.	Complied	Only LED lights are placed in the office buildings and residential areas of TNPL Unit - II. Details attached as Annexure.	**	
56	Deinking sludge and fine sludge from ETP shall be disposed through TSDF.	Complied	There is no deinking process in the project.	N/A	
57	Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.	Being Complied	It is planned to put up each 1 MW Roof Top Solar Power Plant at Unit I and Unit II during 2023-24 through Capital budget Proposals.	N/A	
58	Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.	Complied	TNPL has planted 6.63 lakhs tree saplings in 674.64 Acres earmarked for green belt development as per the details submitted herewith as Annexure XIX.	POF.	
59	Sufficient number of colour coded waste collection bins shall be constructed at shop floors in each shop to systematically segregate and store waste materials generating at the shop floors (other than Process waste) in designated coloured bins for value addition by promoting reuse of such wastes and for good housekeeping.	Complied	This condition is being strictly adhered and relevant photographs are attached as Annexure XVIII	705	
60	The project proponent shall carry out heat stress analysis for the workman who work	Complied	No high temperature	N/A	

	in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.	work zone is available.		
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I' TAMIL NADU NEWSPRINT AND PAPERS LIMITED ' hereby give undertaking that the specific / general condition is entered by me is correct.

E-Sign

TAMIL NADU NEWSPRINT AND PAPERS LIMITED Date: 02 Mar 2023 14:41:49:777

\*\*Note: N/A - Not Available

**PRINT** 



# Tamilnado Newsprint and Papers Limited

(A Government of Tamilnadu Enterprise) Mondipatti, K. Periyapatti Post, Manapparai Taluk - 621 306, Tiruchirappalli District, Tamilnadu, India.

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ENV/TNPCB/UNIT II/189 27<sup>th</sup> September 2023

To
The Joint Chief Environmental Engineer,
Tamil Nadu Pollution Control Board,
25, SIDCO Developed Plot Estate,
Thuvakudy, Trichy - 620 105.

Dear Sir,

<u>Sub:</u> TNPL Double coated Multilayer Paper Board Plant & Captive Power Plant – Environmental Statement (Form V) details furnished- reg

We enclosed the Environmental Statement pertaining to TNPL Double Coated Multilayer Paper Board Plant and Captive Power Plant for the financial year ending 31st March 2023, in Form V duly filled in with all relevant details as per Environmental (Protection) Act, and rules 1986.

This is for your kind information

Thanking you Yours Falthfully,

For TAMIL NADU NEWSPRINT AND PAPERS LIMITED,

(D.V.S.S.A. Bhanu Prasad)

CHIEF GENERAL MANAGER (BOARD PLANT)

CC: The District Environmental Engineer, Tamil Nadu Pollution Control Board, 25, SIDCO Developed Plot Estate, Thuvakudy, Trichy – 620 105.

Corporate Office: 67, Mount Road, Guindy, Chennai - 600 032.

TNPL - The Corporate Identity Number: L 22121 TN 1979 PL C 007799

Fax: 044 - 22350834 / 22354614, Phone: 044 - 22354415 / 16 / 18, 22301094 - 97, E - mail: response@tnpl.co.in / sales.unit2fct@tnpl.co.in, Web: www.tnpl.com

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### **ENVIRONMENTAL STATEMENT**

(FORM - V)

**FOR THE YEAR: 2022 -23** 



### TAMIL NADU NEWSPRINT AND PAPERS LIMITED- UNIT II

Mondipatti Village,

 $K. Periyapatti\ Post,\ Manapparai\ Taluk.$ 

Tiruchirappalli District – 621 306



### FORM - V

(See Rule: 14)

## Environmental Audit Report for the financial year ending the 31st March 2023

### PART – A

(i) Name and address of the

TAMIL NADU NEWSPRINT AND PAPERS

Owner/occupier of the

LIMITED - UNIT II.

Industry,

operation or process

Mondipatty village, K.Periyapatti post,

Manapparai Taluk. Tiruchirappalli district

Pin code: 621 306

(ii) Industry category

Primary: -

(STC code)

Red

Secondary: - (SIC code)

(iii) Production capacity – Units

a) Double Coated Multilayer : 200000 MT/Annum

Paper Board

b) Elemental Chlorine Free

(ECF) Chemical Wood Pulp

140000 MT/Annum

c) Power Generation

**50MW** 

d) Steam

180TPH

(iv) Year of establishment

January 2016

(v) Date of the last environmental

statement submitted

30.09.2022



### PART - B

### Water and Raw material consumption

### A. PAPER BOARD PLANT

SI No	Description	UOM	Quantity
1.	Overall Water Consumption	KL/day	8270
2.	Process Water Consumption		
2a)	Board Machine	KL/day	4718
2b)	Pulpmill & Soda Recovery Plant	KL/day	3543
	Total Process Water	KL/day	8261
3.	Water used for boiler feed	KL/day	0
4.	Water used for Cooling purpose	KL/day	0
5.	Domestic Water	KL/day	9

### **B.** CAPTIVE CO GEN PLANT

SI No	Description	UOM	Quantity
1.	Overall Water Consumption	KL/day	2619
2.	Process Water Consumption	KL/day	2163
3.	Water used for boiler feed	KL/day	447
4.	Water used for Cooling purpose	KL/day	447
5.	Domestic Water	KL/day	9



Name of Product	Process Water consumption (except Domestic) per unit (MT) of products		
	During the last financial year (2021-2022) (1)	During the current financial year (2022-2023) (2)	
Double Coated Multilayer Paper Board	11.0 M3 /MT	18.0 M3 /MT	

### (ii) RAW MATERIAL CONSUMPTION

			Consumption of ra unit of c	
SI. No	Name of the raw Name of material Products		During the Last Financial year (2021-22)	During the current Financial year (2022-23)
Unit of measurement			ADMT/MT of Pa	per Produced
1.	Wood		-	4.375
2.	Imported Hardwood Sulphate Pulp		0.252	0.030
3.	Imported Softwood Sulphate Pulp		0.014	0.018
4.	Imported BCTM Pulp	Double	0.264	0.324
5.	Hardwood Wet lap Pulp	Coated Multilayer	0.067	0.001
6.	Deinked Wet lap Pulp	Paper Board	0.045	-
7.	Bagasse Wet lap Pulp		0.006	0.001
8.	Imported Waste Paper		0.088	0.007
9.	Indigenous Waste Paper		0.154	0.002

### **PRODUCTS MANUFACTURED**

Double Coated Multilayer Paper Board : 168035 MT

Overall daily average Power Production : 14 MW



### PART - C

# POLLUTION DISCHARGED TO ENVIRONMENT / UNIT OF OUTPUT (Parameter as specified in the consent issued)

### (a) WATER

(i)	Pollutants	Quantity of pollutants discharged (MTs/day)	Quantity of pollutants discharged in (kgs/T of Paper	Concentration of pollutants discharged in (mg/l) except % sodium	Percentage variation from prescribed in discharges standards with reasons
	TSS	0.8	1.7	88	Nil
	TDS	16.8	36.6	1870	Nil
	COD	9.5	20.7	1060	Nil
Water	BOD	2.6	5.7	292	Nil
water	Chloride	4.3	9.3	477	Nil
	Oil & Grease	0	0	0	Nil
	Sulphates	4.2	9.2	471	Nil
	Na (%)	0.3	0.7	38	Nil

<sup>\*</sup>As per TNPCB Results



### **Effluent Quantity generation and disposal details:**

SI No	Description		Quantity
01	Pulpmill	KL/day	2165
02	Soda Recovery Plant	KL/day	1041
03	Board Plant	KL/day	4784
04	04 Captive Co Generation Plant		0
Total E	Effluent quantity generated	KL/day	7990
Total Effluent quantity treated			7439
Process Evaporation Loss			551
Combi	ned treated Trade Effluent (On Land for irrigation)	KL/day	7126
Combined treated Trade Effluent (Internal Plantation – Plant			59
Combined treated Trade Effluent (Recycling to process)			255



(b)AIR

### **Board Plant (Pulp and Board Manufacturing Facility)**

Name of Pollutant: SPM (mg/NM³)

Prescribed Norms: 150 mg/NM<sup>3</sup>

SI No.	Stack attached to	Average Quantity of pollutants emitted (Kgs per day)	Average Quantity of pollutants emitted in (Kg per ton of paper Board)	Average Concentration of pollutants emitted in mg/NM <sup>3*</sup>	Percentage variation from prescribed in discharges standards with reasons
1	Recovery Boiler	18.78	0.04	22	Nil
2	Lime Kiln	10.63	0.02	24	Nil

<sup>\*</sup>As per TNPCB results

Name of Pollutant: SO<sub>2</sub> (mg/NM<sup>3</sup>)

Prescribed Norms: Recovery Boiler - 600 mg/NM<sup>3</sup>

Lime Kiln - 400 mg/NM<sup>3</sup>

SI No.	Stack attached to	Average Quantity of pollutants emitted (Kgs per day)	Average Quantity of pollutants emitted in (Kg per ton of paper Board)	Average Concentration of pollutants emitted in mg/NM <sup>3*</sup>	Percentage variation from prescribed in discharges standards with reasons
1	Recovery Boiler	205.8	0.45	241	Nil
2	Lime Kiln	129.8	0.28	293	Nil

<sup>\*</sup>As per TNPCB results



Name of Pollutant:  $NO_x$  (mg/NM<sup>3</sup>)

Prescribed Norms: Recovery Boiler - 300 mg/NM<sup>3</sup>

Lime Kiln - 500 mg/NM<sup>3</sup>

SI No.	Stack attached to	Average Quantity of pollutants emitted (Kgs per day)	Average Quantity of pollutants emitted in (Kg per ton of paper Board)	Average Concentration of pollutants emitted in mg/NM <sup>3*</sup>	Percentage variation from prescribed in discharges standards with reasons
1	Recovery Boiler	229.67	0.50	269	Nil
2	Lime Kiln	96.59	0.21	218	Nil

<sup>\*</sup>As per TNPCB results

### **RECOVERY BOILER:**

No of Boiler : 1 No

Type of Fuel : Black Liquor solids & Furnace Oil

Type of Firing : Black Liquor spray Guns

Average Quantity of Fuel Fired in Boilers:

Description	Type of Fuel Used		
	Black Liquor Dry Solids	Furnace Oil	
UOM	MT/Hr	KL/Hr	
Recovery Boiler	25.94	0.186	



### LIME KILN:

No of Unit : 1 No

Type of Fuel : Furnace Oil
Type of Firing : Oil Burner

Average Quantity of Fuel Fired in Lime Kiln:

Description	Type of Fuel Used
	Furnace Oil
UOM	KL/Hr
Lime Kiln	0.769

### **CAPTIVE POWER PLANT**

Name of Pollutant: SPM (mg/NM³)

Prescribed Norms: 50 mg/NM<sup>3</sup>

SI No.	Stack attached to	Average Quantity of pollutants emitted (Kgs per day)	Average Quantity of pollutants emitted in (Kg per ton of paper Board)	Average Concentration of pollutants emitted in mg/NM <sup>3*</sup>	Percentage variation from prescribed in discharges standards with reasons
1	Power Boiler	102.07	0.22	27	Nil

<sup>\*</sup>As per TNPCB results



Name of Pollutant: SO<sub>2</sub> (mg/NM<sup>3</sup>)

Prescribed Norms: 600 mg/NM<sup>3</sup>

SI No.	Stack attached to	Average Quantity of pollutants emitted (Kgs per day)	Average Quantity of pollutants emitted in (Kg per ton of paper Board)	Average Concentration of pollutants emitted in mg/NM <sup>3*</sup>	Percentage variation from prescribed in discharges standards with reasons
1	Power Boiler	1243.72	2.70	329	Nil

<sup>\*</sup>As per TNPCB results

Name of Pollutant: NO<sub>x</sub>(mg/NM<sup>3</sup>)

Prescribed Norms: 300 mg/NM<sup>3</sup>

SI No.	Stack attached to	Average Quantity of pollutants emitted (Kgs per day)	Average Quantity of pollutants emitted in (Kg per ton of paper Board)	Average Concentration of pollutants emitted in mg/NM <sup>3*</sup>	Percentage variation from prescribed in discharges standards with reasons
1	Power Boiler	1013.12	2.20	268	Nil

<sup>\*</sup>As per TNPCB results



#### Power Boiler:

No of Boiler : 2

Type of Fuel : Coal, Raw Lignite and Wood Dust

Type of Firing : Under Bed and Over Bed firing

# Average Quantity of Fuel Fired in Boilers:

Description	Indigenenous Coal	Imported Coal	Raw Lignite	Wood Dust	Paddy Husk
UOM	Kg/Hr	Kg/Hr	Kg/Hr	Kg/Hr	Kg/Hr
Power Boiler	2170	14112	3952	1908	34

# PART - D Hazardous Wastes

		TOTAL QUANTITY in MT		
Name of Hazardous Wastes	UOM	During the Last financial year 20221- 2022	During the Current financial year 2022 - 2023	
(a) Used oil/spent oil generated from Industrial operations as lubricant in hydraulic systems or other operations	MT	22.08	9.84	
(b) Chemical sludge from wastewater treatment plant	MT	5278	5717	
(c) Lead concentration limit equal to (or) more than 5mg/L	MT	0.00	1.20	
(d) Copper concentration limit equal to (or) more than 25mg/L	MT	0.00	6.68	



#### **Other Hazardous wastes**

		TOTAL QUANTITY in MT		
_Name of Hazardous Wastes	UOM	During the Last financial year 2021-2022	During the Current financial year 2022-2023	
(a) Waste and scrap of paper / paper board of unbleached paper or paperboard or of corrugated paper or paperboard	MT	5493	-	
(b) Waste and scrap of paper or paperboard of other paper or paperboard, made mainly of bleached chemical pulp, not coloured in the mass	MT	10993	-	
(c) Waste and scrap of paper or paperboard of paper or paperboard, made mainly of mechanical pulp	MT	25446	-	
(d) Waste and scrap of paper or paperboard of other, including but not limited to (1) laminated paperboard, (2) Unsorted scrap	MT	4	-	



# PART – E

# Solid Wastes Generation

DESCRIPTION	TOTAL QUANTITY	
Solid wastes generation	During the last financial year 2021 -2022 (MT)	During the current financial year 2022 - 2023 (MT)
(a) From Pro	ocess .	
Plastic Wastes From Board Plant	4226.50	102.28
Wood Dust from wood handling Plant	-	15966.79
(b) From Pollution Co	ontrol Facility	
MLSS - ETP Secondary Sludge (OD Basis)	104.2	194
Bio-sludge from STP (BD)	0.70	0.620
Boiler Economizer Wet Fly Ash	18342	8144
Boiler Fly ash from ESP	7783	13064
(c) Solid Wastes Recycled/ Dis	sposed / Sold Qua	antity
Plastic Waste for Cement manufacturing	4226.50	102.28
Wood Dust	-	15966.79
Bio sludge from ETP as Manure	104.2	194
Bio sludge from STP as Manure	0.70	0.620
Boiler Economizer Wet Fly Ash for Brick manufacturing units	18342	8144
Boiler Fly ash from ESP recycled to LSFM (TNPL Cement factory)	7783	13064



# <u>PART – F</u>

The characteristics of solid as well as Hazardous wastes and disposal practice adopted are given below.

# Solid wastes

SI. No	Description	Major constituents: (all values are on OD basis)	Mode of disposal
1	Plastic Waste generated from Waste Paper	Received various types of plastic wastes along with Waste Paper consignment	Disposed to cement Plant for Co Processing
2	Wood Dust from Chipper House	Ash: 2.4% Volatile Matter: 71.5% Fixed carbon: 18.9% Gross Calorific Value: 4000- 6000 Kcal/Kg	Wood dust is used as Fuel in Power Boiler
3	Bio sludge from ETP- MLSS	Adsorbable Organic Halide - BDL	Composted and used as Manure
4	Boiler Economizer Wet Ash	Ash : 90-95% LOI : 3 - 5%	Disposed to Brick Manufacturing units
5	Boiler Fly ash from ESP recycled to LSFM (TNPL Cement factory)	Ash: 88 to 92% LOI: 8 to 12%	Used as Raw material for TNPL Cement & other Cement mills.



# **HAZARDOUS WASTES**

SI. No	Description	Major Constituents	Mode of disposal
1.	(a) Used oil/spent oil generated from Industrial operations as lubricant in hydraulic systems or other operations	Chromium: 0.15ppm Total Halogens: 3805 ppm Lead: 3.85 ppm Nickel: 0.18 ppm	Disposed to PCB Authorized recyclers.
2.	(b) Chemical sludge from wastewater treatment plant	Gross Calorific value: 2300-2700 Kcal/kg (OD basis) Organics: 60-70% Inorganics: 30-40%	Sold as raw material to small cardboard Industries.
3.	(c) Lead concentration limit equal to (or) more than 5mg/L	Wastes mainly contains lead	Disposed to PCB Authorized recyclers.
4.	(d) Copper concentration limit equal to (or) more than 25mg/L	Wastes mainly contains copper and its alloy such as brass, bronze etc.,	Disposed to PCB Authorized recyclers.



#### TNPL UNIT II

#### GREEN BELT DEVELOPMENT/IRRIGATION SCHEME

The area allocated for greenery development under Captive Power Plant, Board Plant and Additional areas pertaining to TNPL Unit-II is summarized as below:

#### Power Plant (Mondipatti)

Total extent of Land Area (in Hectares)	16.187
Green belt/Irrigation area developed (in Hectares) :	6.465

#### **Board Plant (Mondipatti)**

Total extent of Land Area (in Hectares)	106.872
Green belt/Irrigation area developed (in Hectares) :	46.555

### Additional area in Chettichatram & K. Periyapatti

Total extent of Land Area (in Hectares)	231.129
Green belt/Irrigation area developed (in Hectares) :	210.663

Total Green Belt/Irrigation Area (in Ha): 5.665+36.155+210.663 = 272.949 Hect. i.e. Total area covered under plantation using treated effluent = 252.483 Hect.

TABLE A: Summary of TNPL Unit II Tree planting details as on 31/03/2023

SI No	Area	Total area so far covered in Hectares	Total No. of trees so far planted
01	Captive Power Plant (Mondipatti)	6.465	28,290
02	Board Plant (Mondipatti)	46.555	100590
03	Additional Area in Chetttichatram & K. Periyapatti	210.663	6,82,903

<sup>\*</sup>Out of 231.129 Hectares, 20.466 hectares are TNPL Unit – II Township. Remaining area of 210.663 Ha is under greenbelt area.



TABLE B:
Tree planted details in Captive Power Plant (Mondipatti) as on 31/03/2023

SI. NO	Name of the Tree	No. of Trees
1	Millingtonia (Maramalli)	520
2	Polyalthiya longifolia	48
3	Pongamia pinnata (Pungam)	305
4	Syzygium cumini (Jamun)	25
5	Terminalia catappa (Badam)	850
6	Thespesia populnea (Puvarasu)	80
7	Eucalyptus hybrid (Eucalyptus)	11899
8	Casuarina equisetifolia (Casuarina)	13744
9	Muntingia calabura (Singapore cherry)	16
10	Mimusops elengi (Mahilam)	21
11	Azadircta indica (Neem)	47
12	Kigelia pinnata (Siva kundalam)	21
13	Conocarpus erectus (Button wood)	300
14	Peltophorum pterocarpum (Pheltophorum)	396
15	Cassia Fistula (Sarakondrai)	2
16	Deloxix regia (Gulmuhar)	16
	TOTAL	28290



TABLE C:
Tree planted details in Board Plant (Mondipatti) as on 31/03/2023

SL.		No. of Trees
NO	Name of the Tree	
1	Acrocarpus	810
2	Azadirachta indica(Neem)	954
3	Casuarina	48,796
4	Dalbergia sisoo	15,108
5	Delonix regia (Gulmour)	287
6	Eucalyptus Hybrid	30,614
7	Ficus benghalensis (Alam)	104
8	Ficus religiosa (Arasu)	108
9	Fishtail palm	53
10	Lagerstroemia	34
11	Tectona grandis	637
12	Ficus Racemosa	10
13	Terminalia arjuna	100
14	Bauhinia purpurea	391
15	Thespesia populnea	95
16	Simarouba glauca	95
17	Conocarpus erectus	319
18	Millettia pinnata (Pungan)	500
19	Millingtonia hortensis	215
20	Mimusops elengi (Magilam)	200
21	Muntingia calabura (Singapur jerry)	200
22	Peltophorum pterocarpum	142
23	Terminalia catappa	370
24	Fishtail palm	110
25	Terminalia Mantaly	25
26	Albizia lebbeck	28
27	Samanea saman(Rain Tree)	285
	TOTAL	100590



#### TABLE D:

# Tree planted details in Additional Area in Chetttichatram & K. Periyapatti as on 31/03/2023

S.No	Name of the Tree	No. of Trees
1	Acacia auriculiformis	10673
2	Aalamaram	209
3	Acacia Hybrid	28214
4	Amla / Naaval	3056
5	Arasu	65
6	Ashoka	1
7	Badam	2380
8	Bamboo	12881
9	Black pearl tree	5
10	Casai Siamia	4760
11	Cashewnut/Simaruba	2756
12	Casuarina equisetifolia	35154
13	Casuarina hybrid	221657
14	Casuarina junghuhniana	72953
15	Coconut (AT)	799
16	Coconut (D x T)	302
17	Coconut (Dwarf-Orange)	482
18	Coconut (ECT)	1839
19	Coconut (T x D)	1625
20	Coconut (WCT)	448
21	Croscentia cujete	5
22	Eucalyptus Hybrid	55811
23	Gmelina arborea	240
24	Guava/ Jack/ pithcelobium/Lemon	5905
25	Gulmohar	212
26	Iluppai	211
27	Kadam	15551
28	Karungali	8
29	Khaya	9150
30	Leuceana	10060
31	Mahagony	10871
32	Mango	10000
33	Melia	28385
34	Neem	11395



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35	Neer marudhu	5335
36	Night queen tree	5
37	Noni maram	5
38	Peltophorum	30
39	Pomegranate	2000
40	Poovarasu/Pungan	6557
41	Punnai	5
42	Puthrajeevi	5
43	Red sandal	3000
44	Rose wood	2740
45	Sandal	2271
46	Sappota /Seethapal	907
47	Silk cotton	2200
48	Silver Oak	700
49	Sissoo	64645
50	Soap nut	5
51	Star fruit	5
52	Tamarind	2975
53	Teak	20963
54	Vagai	2777
55	Vasambu	5
56	Vengai	800
57	Water apple	5
58	Banana	3500
59	Conocarpus erectus	450
60	Khaya anthotheca	500
61	Vachellia nilotica	200
62	Madhuca longifolia	400
63	Terminalia bellirica	1850
	Grand Total	6,82,903



#### View on Flora



Coconut plantation (Cocus nucifera)



Teak (Tectona grandis)



Arjun Tree (Terminalia arjuna)



African mahogany (Khaya scenegalensis)



Pungan (Millettia pinnata)



Butter Tree (Madhuca longifolia)



Casuarina (Casuarina sps)



Guava (*Psidium gujava*)

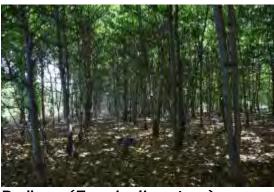




Sapota(Manilkara zapota)



Mango (Mangifera indica)



Badham (Terminalia catapa)



Eucalyptus (Eucalyptus sps)



Neolamarckia cadamba (Cadambam)



Thespesia populnea (Poovarasu)



Acacia mangium (Mangium)



Cassia siamina (Manjalkonrai)



#### View of Herbs



Sickle bush



Jackal jujube

# View of Fauna



Cat Snake



Grey slender loris



Tawny coster



Chameleon



Bar-headed goose



Black winged stilt







Shikra

Peacock pansy



Road Avenue (Elephant Ear Trees)



Wet land habitat for birds



#### PART – H

# Additional measures / Investment proposals for Environmental Protection including Abatement of Pollution, Prevention of Pollution

Donation of Yellow Cloth Bags (Manjappai) vending Machine which costs about Rs, 2,21,000 for public use at Trichy, Collectorate was done on 13.03.2023.



➤ World Environment Day was celebrated on 05<sup>th</sup> June 2022 by fixing Banners at the entrance gates of the mill. Pledge was taken by all the employees and workers in their respective departments to create awareness.







➤ World Ozone Day was celebrated on 16<sup>th</sup> September 2022 by fixing Banners at the entrance gates of the mill. Pledge was taken by all the employees and workers to create awareness.





> Construction of Storm water drains of 2160 metres length & collection Tank were made to collect and reuse the rain water.



➤ Every half year Environmental Quality Assessment in the use of Paper Board Industry (TNPL Unit II) Waste Water for Agro-Forestry System is being done by Anbil Dharma lingam Agricultural College and Research Institute Tiruchirappalli - 620 009



#### TAMILNADU NEWSPRINT AND PAPERS LIMITED - UNIT-II

> As a part of environment protection and to maintain hygiene in work place 5 colour coded bins were placed at various places of the unit







#### Details of CER activities for the year 2022-2023 are as follows:

According to the directions of Ministry of Environment, Forest and Climate Change [MoEF&CC], CER activities are being carried out in Unit-II under the following 5 sectors, since 2019.

- 1. Education
- 2. Health care and medical service
- 3. Socio economic development and security
- 4. Environment and sanitation
- 5. Culture and Heritage

During the financial year 2022-23, TNPL Unit-II has spent Rs.67 Lakhs and had done various programmes under CER.

#### 1. Education sector:

> The company has provided 10 Nos. of steel benches with desks to Panchayat Union Primary school, Kalingapatti and also attended roof leakage arrest works of school.







The company has arranged a new kitchen and floor tiles to all class rooms of Panchayat Union Primary school, Alagirireddipatti, belongs to K.Periyapatti Panchayat.





#### 2. Health care and medical service:

➤ Organized free eye camp at Govt. High school, Pathiripatti in association with Aravind Eye hospital, Madurai for the nearby village public. Provided free spectacles to 49 persons and 83 persons were taken to Madurai for free eye surgery.



➤ A cheque of Rs. 2 Lakhs was handed over to Government Head quarters Hospital, Manapparai for their Hospital infrastructure development.







> The company has constructed and handed over a new toilet building for outpatients' usage at GPHC, Maravanur.



# 3. Socio economic development and security

➤ The company has organized an awareness programme to Vadukkuserpatti Cooperative Milk Society members and provided Aavin's cattle feed pockets to their 482 cattles.





➤ The company has sponsored Rs. 5 Lakhs to Trichy District Collector for organizing awareness events at District level on account of 44th International Chess Olympiad hosted by Government of Tamilnadu.



The company has renovated the public park at Karichampatti hamlet of Chithanatham Panchayat.



#### 4. Environment and sanitation

➤ The company has planted 400 saplings at Vadukkuserpatti pond on world environment day [05.06.2022]. K.Periyapatti panchayat president inaugurated this activity.





#### 5. Culture and Heritage

The company has provided painting materials, attended paver block flooring works and provided front hall shed to Arulmigu Kaliamman Temple of Poongudipatti (belongs to Mondipatti Panchayat.



➤ The company has provided 4 wheel chairs to Jembukeswarar temple at Tiruvanikovil, Trichy for the usage of differently abled persons and aged devotees.



----END OF THE REPORT---

### Status of Environment Management Plan of EIA study report

#### I. AIR QUALITY MANAGEMENT PLAN

#### EMP 1

Due to utilization of the high calorific imported coal with sulphur content less than 1%, the specific SO2 emission rate from the proposed facility will be two to three times lower than that of the conventional co- generation power plants that are operated on Indian coal. Dedicated Electrostatic Precipitators (ESP) will be installed for control of Particulate Matter (PM) emissions from the proposed boiler in the captive power plant. ESP will be designed to achieve emission norms of 30 mg/Nm3 as per MoEF&CC January 2017regulations.

#### Compliance

As the scope on installation of new power boiler is under Phase-2 of expansion, the ESP will be installed along with the new boiler.

#### EMP 2

A dry limestone/ lime sludge injection system shall be installed to meet the SO2 emissions. Lime stone demand will be about 4 T/T of SO2 emissions from the facility and additional fly ash to the tune of 3 T/T of SO2 will be generated from the proposed power boiler.

#### **Compliance**

As the scope on installation of new power boiler is under Phase-2 of expansion, the dry limestone/ lime sludge injection system will be installed along with the new boiler.

#### EMP 3

A 100 m tall stack will be installed to disperse the stack gases as per the minimum stack height norms. The predicted ground level concentrations will be complying with the NAAQ Standards.

#### Compliance

As the scope on installation of new power boiler is under Phase-2 of expansion, the 100 m tall stack will be installed along with the new boiler.

#### EMP 4

Stacks of height 90 m and 35 m will be installed for chemical recovery boiler and lime kiln respectively as per the minimum stack height norms.

#### **Compliance**

Stack of height 90 m & stack of height 54.8 m were installed for chemical recovery boiler & Lime Kiln stack respectively.

#### Chemical Recovery Boiler Stack – 90 m height

#### Lime Kiln Stack - 54.8 m height





#### EMP 5

Like the existing boiler, continuous online stack emission monitoring unit will be installed to monitor Particulate Matter, SO2 and NOx emissions for the proposed boiler.

#### Compliance

TNPL has provided Continuous online stack emission monitoring system for measuring Particulate Matter, SO2 and NOx emissions for the existing Power boiler, Recovery Boiler & Lime Kiln which are in operation. The same facility will be provided for the proposed boiler which will be installed under phase II of MEP.

#### II. FUGITIVE EMISSIONS CONTROL MANAGEMENT

#### <u>EMP 1</u>

Existing Closed belt conveyors will be used to transport coal from stock yard to boiler house.

#### **Compliance**

Closed belt conveyors are being used to transport coal from stock yard to existing boiler which is in operation. The same facility will be extended for the proposed power boiler, which will be installed under part of MEP Phase II.



Closed hoods for coal conveyors



#### <u>EMP 2</u>

Existing Closed belt conveyors will be extended up to the new boiler.

### **Compliance**

Closed belt conveyors has been provided for the existing boiler which will be extended for the proposed boiler under Phase II of MEP.



#### **EMP 3**

Similar to the existing operations, ash will be transported by closed bulkers to potential users.

#### **Compliance**

The same facility will be extended for the proposed boiler under Phase II of MEP.



#### EMP 4

Adequate numbers of water sprinkling system at coal storage yard has been already installed and intensity of the water sprinkling will be done based on the amount of coal handled and meteorological conditions.

#### Compliance

Adequate numbers of water sprinkling system at coal storage yard is already installed. Based on the requirement, additional water sprinklers will be extended in phase II of expansion.



#### **EMP 5**

Unloading of coal trucks will be carried out with proper care, avoiding dropping of the materials from height. It is advisable to moisten the material by sprinkling water while unloading, handling and during storage.

#### Compliance

This practice is being followed from the inception of the unit and shall be continued on post MEP implementation also.



#### <u>EMP 6</u>

Existing Mobile road dust cleaning machines will be employed to collect coal fines if any.

#### **Compliance**

Mobile road dust cleaning machines is employed to collect coal fines.



#### <u>EMP 7</u>

High efficiency bag filters are installed at the coal yard, coal transfer points and preparation yards for the control of dust.

#### **Compliance**

Bag filters are installed in the Dust Extraction system to control dust on Coal Handling Plant.



#### **EMP 8**

Adequately designed greenbelt is developed for further control the fugitive emissions.

#### **Compliance**

The required greenbelt is designed as per the norms of CPCB and established well within the plant area. 1,28,880 no. of green belt trees with different species were planted in 131.01 acres to effectively control fugitive emission which covers 35 % of the total plant area developed and being maintained.





#### III. MANAGEMENT OF NON CONDENSABLE GASES (NCG) EMISSION

#### **EMP 1 to 3**

Emissions from digester relief and digester pulp discharge tanks will be connected to water striping in the scrubber and the non- condensable gases will be fired in the lime kiln. A lime kiln of 250 TPD capacity is proposed to be installed under the MEP. Emissions from digester tank relief tanks will be connected to lime kiln Emissions from evaporator condenser, will be connected to lime kiln.

#### **Compliance**

#### **BRIEF WRITE-UP ON DNCG & CNCG COLLECTION AND INCINERATION**

As part of Mill Expansion Plan, TNPL installed a 400 TPD Hardwood Pulp mill, along with connected Chemical Recovery System. During the Pulping process, certain reduced Sulphur based Non-Condensable Gases (NCG) is generated which will create odorous environment, in and around the mill area. In order to have an odour free environment, a state of the art technology has been considered right at the concept stage of the project.

Accordingly, a full fledged NCG collection and incineration system has been installed which plays a vital role in helping the pulp mill meet strict environmental regulations as well as being a good neighbour in the surrounding community.

There are two main sources of NCG in a pulping process. Some sources emit a small, but highly concentrated amount (Concentrated NCG or CNCG), while others emit large volumes with low concentrations (Dilute NCG or DNCG). During the process, Dilute NCG is generated in the Pulp mill digester and the Black liquor storage areas, while Concentrated

NCG is generated in the Black liquor evaporation process. The DNCG and CNCG are collected and incinerated through exclusive systems, as described below:

#### **CNCG & Methanol Generation and incineration**

The foul condensate from the Black liquor Evaporation plant is stripped through LP steam or first effect vapour. After stripping the Foul condensate is received as "A" condensate, which is recycled back in the process and the stripper outlet gas (SOG) is further stripped through LP steam in a methanol column. From the stripper column, CNCG is generated and the methanol is recovered in liquid form.

Methanol generated is stored in a storage tank and then used as fired in the Lime Kiln.

In addition to the CNCG generated from the SOG stripping of Evaporation plant, the gases emanating from Vacuum pump shall also be collected and transferred to Lime Kiln through a steam ejector, for firing.

In case of Lime Kiln stoppage, the CNCG is routed through a flare system, where the gases are fired.

#### Collection and incineration of DNCG

All storage tanks from Evaporator plant (Weak Black Liquor, Spill Liquor, Condensate storage tanks, HBL tank) vents are connected through a flap valve to collect the DNCG. The DNCG shall be scrubbed with cooling water and then through a blower it is sent to the Chemical Recovery Boiler.

Similarly, all storage tanks from Recausticising plant (White Liquor tanks, Green Liquor tanks, Dregs tanks, Weak white liquor tank, Dilution tank, wash water tank) vents are connected to collect the DNCG, for subsequent firing in the Chemical Recovery Boiler.

The Pulp mill has a separate collection system for the DNCG gases from the Digesters, Pulp Discharge tank and the Black liquor storage tanks. The DNCG system forms part of the Hardwood digester. The system delivers the DNCG after necessary scrubbing and joins the DNCG collected from the Evaporator and Recausticizing area, and fired into the Chemical Recovery Boiler.

DNCG forms part of the secondary air in the Recovery Boiler. A DNCG fan in the Recovery Boiler receives gases from all the above areas and the gas pressure is raised to ensure entry of the DNCG without any interruption through the Secondary air duct. The DNCG fan speed is controlled by a Variable Frequency drive.

DNCG fan delivery first flows to the DNCG gas preheater. Gas is heated by both LP and MP steam gas preheater. Gas is preheated to match the secondary air duct temperature of 130-150 Deg C. After preheating gases are led to the secondary air duct.

#### EMP 4

Vents from bleaching tanks will be connected to a alkali scrubber.

#### **Compliance**

Vents from bleaching tanks were connected to a alkali scrubber.





#### **IV. NOISE MANGEMENT PLAN**

#### <u>EMP 1</u>

Steam turbine and turbo-generator in the co-generation plants will be provided with acoustic insulation and, also, will be placed in a closed room.

#### **Compliance**

Turbo – generator is provided with acoustic insulation and placed in closed room as shown.







#### <u>EMP 2</u>

Appropriate noise barriers/shields, silencers etc will be provided in the equipment, wherever feasible and necessary. As far as possible, noise emanating from noisy equipment shall be adequately attenuated by enclosures, insulations etc.

#### **Compliance**

Noise barriers/ shields, silencers etc., are installed in the system.



#### <u>EMP 3</u>

Ear plugs are being provided to workmen working near high noise generating sources.

#### **Compliance**

Ear Plugs are provided to the persons working near high noise generating area.



#### <u>EMP 4</u>

The existing greenbelt around the plant will further attenuate noise levels.

#### **Compliance**

Totally 8,11,783 nos. of trees are planted to reduce the impact of noise level.



# V. WATER AND WASTEWATER MANAGEMENT A) WATER CONSERVATION

#### <u>EMP 1</u>

Fresh Water for the proposed MEP will be sourced from River Cauvery through collector wells with the permission already obtained from State Government. Water reuse and recycling will be carried out in the plant to maintain water consumption less than 25 m3/t of Paper.

#### Compliance

Fresh water is being sourced from river Cauvery. Necessary approval is obtained from state government.

After Phase – 1 of MEP, around 1000 m3/day of water is recycled and reused in the process. Further specific consumption less than 25 m3/t of paper will be achieved after installation of Paper Machine of 165000 TPA which will be installed in Phase-2.

#### EMP 2

The fresh water requirement for the mill is about 7,700 m3/day which is equivalent to around 13 m3/t of paper with respect to current paper production. As a part of MEP further water conservation and recycling programs will be implemented to achieve specific water consumption less than 25m3/t post MEP with total fresh water consumption of about 20,700 m3/day. Continuous efforts shall be made to reduce the water consumption and thereby to reduce the waste water generation.

#### **Compliance**

The specific water consumption of 25m3/t post MEP will be achieved in Phase-2 MEP expansion. Further, TNPL is always taking initiative and implementing water conservation projects to achieve the best result in the pulp and paper segment.

#### **B) WASTE WATER TREATMENT AND MANAGEMENT**

#### <u>EMP 1</u>

Wastewater generated from the plant will be treated in a primary clarifier followed by extended aeration biological treatment plant and the treated effluent will meet the CPCB prescribed irrigation discharge standards. Total estimated wastewater quantity from the facility will be in the order of 18,000 m3/day during the post project scenario. It is proposed to augment the existing ETP to accommodate the additional wastewater to be generated from the expansion activities. The existing wastewater treatment plant can handle 9,000 m3/day of wastewater. It is proposed to augment the existing ETP to treat 12,000 m3/day board machine/ paper machine effluents. A separate ETP for treating for treating wastewater from hardwood pulp mill, chemical recovery and power plant effluents with a capacity of 15,000 m3/day is proposed to be installed. After MEP Project, total ETP capacity shall be 27,000 m3/day for handling wastewater from existing operations and proposed project operations.

#### **Compliance**

After MEP Phase – I, the waste water generation is around 9480 m3/day. A new ETP of capacity 15MLD is installed to handle the waste water generated from Pulp mill and Chemical Recovery plant. Existing ETP is proposed to be augmented in Phase – II of expansion to handle around 12,000 m3/day of waste water from existing board machine and proposed paper machine.

#### New Waste Water Treatment Plant- 15 MLD



#### <u>EMP 2</u>

Dedicated STP is already installed for the colony and if required additional STP's will be installed and the treated water will be reused for green cover and horticulture applications.

#### **Compliance**

Dedicated STP is already installed and in operation in colony area.

The following are the STP details installed in Paper Board Plant and in Captive Co- Gen Plant.

Name of the Treatment Unit	No. of Units	Dimension	Area				
STP's & Septic Tank Covered under Paper Board Unit							
STP #1 (Board machine)	1	20 KLD	Existing				
STP #2 (Guest House)	1	20 KLD	Existing				
STP#3(Pulpmill,FH area)	1	10 KLD	Phase – 1. Installation completed.				
STP#4 (Admin area) - Expansion	1	20 KLD	Phase – 1. Installation completed.				
Total STPs	4	70 KLD	-				
Septic Tank #1 @ Stores Dept	1	4.02mx1.32mx2.53	Phase – 1. Installation completed.				
STP's Covered under Captive Co-Gen Plant							
Captive Power Plant area (STP#1) - Existing	1	10 KLD	Existing				

The entire STP outlet, after treatment will be utilized for on land gardening.

#### **C) TREATED WASTE WATER MANAGEMENT**

#### <u>EMP 1</u>

After utilization of considerable quantity of treated wastewater in the plant, the excess, unutilized treated wastewater will be used for irrigation/greenbelt/green cover development. Combined treated wastewater will be complying with the discharge standards prescribed by CPCB/SPCB for discharge for irrigation. As the areas around the plant are only with rain fed cultivation, farmers are expected to be benefited by using the treated wastewater for irrigation, as is being practiced currently in the Unit # 1 & 2. TNPL Unit 2 has already covered 650 acres of land for green development using existing treated wastewater.

#### **Compliance**

Total green belt area of is 674.18 acres out of which 623.89 acres under drip irrigation project with treated effluent water. Total Green belt Plantation is systematically planned and

established by planting 8,11,783 no. of tree saplings consisting various native and fast growing evergreen forest species. Treated effluent water is being used as prescribed by CPCB/SPCB for discharge for irrigation through drip system. Measures are taken by meticulous planning and execution of the irrigation schemes for effective utilization of treated effluent water the development of the plantation area.

